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ABSTRACT

The Northern Colorado Educational Board of Cooperative Services (NCEBOCS) Information Retrieval Center is designed to provide a communications link for teachers, librarians, and administrators with the latest research, resources and materials in the field of education. The Information Retrieval Center also provides school personnel who contact the Center with ERIC (Educational Resources Information Center) abstracts and summaries in the form of printouts from the computer. With the UNIVAC 9400 Computer inhouse, the range and type of automated retrieval services have expanded to include newly developed products and training programs for product implementation and utilization. The Wave I Six State Retrieval Network, involving Colorado, Utah, Oregon, South Dakota, Washington, and Wyoming, continues to be served by the information retrieval products on an ever-expanding basis. Services were extended through State Departments of Education and/or Regional Centers to include the States of Idaho, North Dakota, Kansas and Montana. The growth and development of the Information Retrieval Center and the regional and nation-wide interest generated by this system is measured by the increase in the number of searches processed during F.Y. 1972. (Author/NH)

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FINAL REPORT

F.Y. 1971-72

Information Retrieval Center of the

NORTHERN COLORADO EDUCATIONAL BOARD OF COOPERATIVE SERVICES

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Executive Director

Project Grant Number

OEG-0-70-4304

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FINAL REPORT
F.Y. 1971 - 1972

August 15, 1972

I. SUMMARY

The Northern Colorado Educational Board of Cooperative Services presented a proposal to the Research and Training Authority of the U.S. Office of Education for the purpose of further refinement and expansion of the operational Six State Automated Information Retrieval Network. The Information Retrieval Center is designed to provide a communications link for teachers, librarians, and administrators with the latest research, resources and materials in the field of education. The Information Retrieval Center also provides school personnel who contact the Center with ERIC (the Educational Resources Information Center) abstracts and summaries in the form of printouts from the computer. With the UNIVAC 9400 Computer inhouse, the range and type of automated retrieval services have expanded to include newly developed products and training programs for product implementation.and utilization. The Wave I Six State Retrieval Network, involving Colorado, Utah, Oregon, South Dakota, Washington, and Wyoming, continues to be served by the Information Retrieval products on an ever-expanding basis. Services were extended through State Departments of Education and/or Regional Centers to include

the States of Idaho, North Dakota, Kansas and Montana. The growth and development of the Information Retrieval Center and the regional and nation-wide interest generated by this system can be measured by the tremendous increase in the number of searches processed during F.Y. 1972.

II. NORTHERN COLORADO EDUCATIONAL BOARD OF COOPERATIVE SERVICES HISTORICAL BACKGROUND

The Northern Colorado Educational Board of Cooperative Services began operation July 1, 1970, offering services to member school districts in the areas of Program Development, Program Evaluation, and a continuation of the Information Retrieval services initiated under previous grants.

Prior to existence of the NCEBOCS, the Information Retrieval Center was housed in the Boulder Valley Public Schools as an ESEA Title III project. This Cooperative Community Educational Resources Center was designed to provide a communications link between the teachers, specialists and administrators and the latest research and resource materials available in the field of education. Objectives of these services were to reduce the delay in providing current educational research to requesters and to increase the professional growth of educators by providing them with individualized research assistance. These services involved automated and manual information retrieval and current awareness researching techniques, using inhouse files, resources of the Education Resources Information Center (ERIC) and inter-library loan systems as well as the university library network and state library systems. Information retrieval searches under the operational grant extended beyond the Boulder Valley and St. Vrain school districts to include additional Colorado school districts, schools of higher

education, and the Colorado Department of Education.

Thus the desirability of leasing an on-site computer for automated information retrieval, plus increased staff to interpret, conduct, and evaluate information searches became imperative. Additional input into NCEBOCS services came in the form of staff expertise gained through experiences with related services projects, i.e. Program Development staff involvement in the Preparing Educational Planners (PEP) program in California schools.

Awareness of services available within the educational community created through the Community Resources Center laid the groundwork for additional service offerings of the NCEBOCS to its member districts.

General objectives for the newly formed NCEBOCS included establishment of a tri-county area comprising seven school districts to be served by the Educational Experimental and Developmental Center of the NCEBOCS, with an overall goal of enhancing the learning process through the coordination of workable Program Development, Program Evaluation, Program Improvement, Program Diffusion, and Long-Range Plans. These long-range plans have included coordination with the local school districts to achieve planned change. At the local district level, needs are identified by member districts, aided by NCEBOCS personnel, and in agreement with those identified by the Colorado State Board of Education. The

staff then assists with the implementation of necessary changes.

School districts and communities served by the Northern Colorado Educational Board of Cooperative Services are composed of urban, suburban, and rural areas in Adams, Boulder, and Larimer counties. Projected growth rates of all three counties are high, due to increased industrialization in the areas and the general popularity of these locations. Occupations of the populations are accordingly diversified, ranging from involvement in major industries such as IBM, Hewlett-Packard, and Kodak, to connections with smaller industries, farming, tourism, and education. NCEBOCS' three associate member universities are included within this area: the University of Colorado in Boulder, Colorado State University in Fort Collins and the University of Northern Colorado in Greeley.

The educational community served within member districts encompasses district administrators, consultants and specialists, teachers, teacher aides and other paraprofessionals, and interested community members, whose common goal is improvement of the students' learning process in the classroom, K-12. Professors, students, and graduate students from the schools of education of the three associate member universities cooperate with the staff to achieve this goal.

Improved learning processes for the approximately 95,000 students enrolled in these seven member districts (1971 enrollment figures) are the objects of these coordinated services. Ethnic composition of these counties is primarily

Anglo, with a small percentage (5-6%) Hispano.

The NCEBOCS operations concentrate on establishing liaisons at the decision-making level and creating in-the-field contacts with individual district and building staff members. In the Program Development and Evaluation areas, activities consist primarily of establishing needs and priorities with assistant superintendents for instruction, and beginning Program Planning and Evaluation procedures. For Information Retrieval, this effort also consists of maintaining contact with established Building and District liaisons, and bringing an awareness of the availability of information services to all districts of the state. Dissemination and diffusion are handled as a function of each component and of the Executive Director, as well as by the established dissemination unit of the Center.

Evaluation techniques employed for this program include an on-site Title III ESEA evaluation team visit, an evaluation of the Information Retrieval Center of the Northern Colorado Educational Board of Cooperative Services conducted by the inhouse evaluation staff of the BOCS, and ongoing evaluation measures implemented by each component of the NCEBOCS.

As a result of the past years' success, the Information Retrieval Center's services have grown to include an expanding regional audience, and have generated national interest. Focus of the future operation includes moving with the decision-making level to the practitioner level (including subject

area consultants and specialists, classroom teachers, paraprofessionals, and community members who work directly with students) within the local districts. In line with this objective, component staff members are spending more time in the field with more district staff members, helping them to actualize their needs into workable programs.

III. NARRATIVE

The basic objectives of the proposal submitted to the U.S. Office of Education (F.Y. 1971-72) are included in this section in order to review the operation of the Retrieval Center. Each of these objectives has been attained during this operational year as indicated by the evaluation section of this report.

The proposal objectives therefore include the following:

Proposal Objectives

1. The major objective of the Information Retrieval Center of the Northern Colorado Educational Board of Cooperative Services is to "provide a unique and innovative educational information retrieval service for educators on a regional and perhaps national basis. This retrieval service provides current and relevant ERIC* resource materials to educators requesting information in the quickest time possible." This major objective is accomplished through the following specific objectives:
   A. The utilization of the computer as a resource tool in order to store and rapidly produce (retrieve) large quantities of educational research and resource information upon request.
   B. The matching of requests for information through

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*ERIC - Educational Resources Information Center of the U.S. Office of Education

a comprehensive search for information in the data base of 50,000+ ERIC (RIE) abstracts. This automated data base grows at a rate of 3,000 to 4,000 individual research and resource abstracts each quarter.

C. Provision of the educational current and relevant educational information in the shortest amount of time possible to community (upon request), including teacher aides, teachers, librarians, administrators, parent study groups, state departments of education officials, U.S. Office of Education personnel, university and college faculties, and graduate students.

D. Dissemination of the following information packages and services to educators (requesters) contacting the Information Retrieval Center:

1. PET (PACKETS OF EDUCATIONAL TOPICS)

   Pre-processed information packages covering current popular topic areas. These packages are mailed the same day that the request enters the Center.

2. CAT (CATALOG OF COMPUTER SEARCHES)

   Computerized searches on specific topics. This product provides less than one week turn-around time for requesters.

3. CAP (CURRENT AWARENESS PROFILES)

   Requesters receive automatic quarterly updates of information on broad educational topics on standing requests.

4. SID (SEARCH IN DEPTH)

The individualized information search for the individual whose needs are so specialized or complex as to require the individual attention of a Retrieval Specialist.

Other major objectives of this proposal include:

2. Expansion of the Six Wave I Regional Network States beyond Washington, Oregon, Utah, South Dakota, Wyoming and Colorado to include the Wave II States of Idaho, North Dakota, Kansas, and Montana (subject to the approval of each State Department of Education) and any other states which the Center can feasibly, practically, and economically include.
3. Continuation of studies into the future possibility of providing all State Departments of Education in the United States with the automated Information Retrieval services (specifically with the PET and CAP products, as described above).
4. Continuation of expansion, development and testing of teleprocessing and telecommunications (terminal) applications for information retrieval beyond the one currently existing terminal in Madison, South Dakota.
5. Continuation of the evaluation of the Information Retrieval system and conduction of cost analysis studies on the existing programs to determine the most practical and economical approach to provide information to educators.

6. Provision of a dissemination and diffusion program for all states involved in the utilization of the automated Information Retrieval program through inservice training sessions and summer workshops.

Therefore all of the above listed objectives have been satisfactorily achieved during the F.Y. 1971-72 grant.

IV. PROCEDURES AND ACTIVITIES

The innovative concept of combining automated and manual information retrieval services, current awareness researching services, and specially developed products has expanded during the Pilot and Operational Grant of this Title III and Title IV Project. This Retrieval Center program is a unique service not duplicated anywhere in the United States at the present time. (See Dr. Burchinal's letter, Appendix A).

The storage and retrieval of educational resources and research data, in order to disseminate and diffuse educational material, helps to provide information products to requesters in a short span of time. Current awareness services for educators in the Ten State Regional Network will continue to expand through the automated searching system of the Center, thereby providing still additional unique services to requesters even though the federal funding has terminated.

Through the experiences gained during the 1971-72 operational phases of the project, it is very apparent that the Center's Information Specialists are extremely qualified to interpret educational requesters' questions or problems and provide research and resource products to match the requester's needs. The ability to negotiate requests increases significantly with the Information Specialist's experience and familiarity with the descriptor terms and the scope of the

three data bases of the Center. The Reference Librarian is also highly skilled in using subject sources as well as descriptor terms in the process of manually researching information to supplement the data provided through the automated search.

Expansion throughout the Ten State Regional Network has been conducted under the following approach employed by the Colorado Department of Education for the continued utilization of automated educational Information Retrieval services. This plan is based on searching the entire automated educational information base which contains over 100,000 abstracts (from three sources) of research and resource materials and grows at a rate of 8,000 to 12,000 abstracts a year. The Research in Education (RIE) abstracts contained in the data base are produced monthly by the U.S. Office of Education's research project, ERIC, the Educational Resources Information Center. The information is received in the Retrieval Center in the form of computer magnetic tapes through a program of quarterly updates from ERIC. The Retrieval Center's data base also provides searches on the RIE (Research in Education) and CIJE (Current Index to Journals in Education) through magnetic tapes also available from ERIC. A search of the RIE data base will produce abstracts including descriptions of innovative and exemplary projects funded by the U.S. Office of Education. The CIJE tapes provide searches for annotated bibliographies on approximately 500 educational periodicals which will be

added to the profile of information mailed to the requesters. Being able to search on these two additional data bases will significantly expand the scope of services available from the Center.

The newest information added to the data base this year includes the AIM and ARM abstracts of research and instructional materials oriented to vocational and technical education.

AIM includes abstracts of materials typically designed for teacher use or student use in the classroom, and annotations of bibliographies or lists of instructional materials. These materials have been generated by universities and state departments of education, curriculum projects, etc. AIM is particularly useful to teachers, teacher educators, curriculum specialists, local directors of vocational education, state supervisors, administrators and others who use instructional materials in the teaching-learning setting or in curriculum development. Those interested in establishing new vocational or technical programs or updating existing programs will find AIM and its indexes an invaluable aid in determining the instructional resources that are presently available.

ARM incorporates abstracts of research and other related materials which are useful to a wide audience of users such as researchers, supervisors, teacher educators, education specialists, curriculum developers, administrators, teachers and others who have an interest in vocational and technical

education and in fields such as industrial arts. Reports that are abstracted include research supported by the U.S. Office of Education, Department of Labor, Office of Economic Opportunity, and educational foundations. Materials generated by state departments, teacher education departments and similar groups are also included.

The Center has been processing an average of 1,032 requests for automated searches per month since July 1, 1971. (See Monthly Statistics Reports in Appendix B).

During F.Y. 1971-72 the following total number of searches were processed and mailed to requesters:

AUTOMATED SEARCHES Total:	11,683	Average/month:	974
MANUAL SEARCHES Total:	701	Average/month:	58
TOTAL SEARCHES	12,384	Average/month:	1,032

The dramatic increase in processed searches graphically indicates the demand for and interest in research and resource materials by educators at all levels.

Three basic Information Retrieval products are now available from the Retrieval Center of the Board of Cooperative Services in order to supplement the individualized searches currently offered by the Center. These products include:

1. PET - Packets of Educational Topics - These 61 packages of information cover popular topic areas in the field of education, presenting a broad

overview of these topics. These pre-processed packages are based on requests of a high demand nature as identified by current users. Packaged information includes manually searched materials, and the product is updated on a daily basis. The basic objective of this package is to provide immediate feedback to requesters with requests processed and mailed within eight days.

2. CAT - Catalog of Computerized Searches - The objective of this package is to include those areas of information frequently requested by users. The catalog description contained in the Guide to IRC Services lists an indexing system and annotations describing the individual topic areas for each of the searches to be received if a requester selects any particular entry. Entries are based on previously requested and researched (specific) areas of interest. These requests are computer processed and mailed within one week after receiving the request.
3. CAP - Current Awareness Profiles - The objective of these 32 packages is to provide Center requesters with a service permitting an automatic quarterly update of the latest information in the data base on requested subjects. The request logic has been predetermined by the Center staff thereby increasing the processing and turn-around time to requesters.

In order to receive the following quarterly update, it is necessary for the requester to return a post card indicating his desire to continue to receive the CAP information.

4. SID - Searches in Depth - The individualized information search which the Center will continue to offer as requested by Colorado educators, is the basic product of the Center. This search, which requires a greater turn-around time than the other three products, will be implemented for those searches which cannot be filled through the other new information products. A two to three week turn-around time is required for these searches because of the comprehensive nature of the information reviewed and individual attention necessary for this product.

For a complete breakdown of the usage statistics, starting July, 1971 through June 30, 1972, see Appendix B). The growth of the Information Retrieval program is a result of both expansion within the Board of Cooperative Services area and as reflected by the increase in requests from the Ten State Regional effort.

The states of Washington, Utah, Oregon, South Dakota, Texas, Wyoming, Colorado, North Dakota, Kansas, Montana and Idaho had complete access to the Information Retrieval services under the ESEA Title IV Grant (for F.Y. 1971-72)

from the Research and Training Authority of the U.S. Office of Education. Complete access, (as stated above) refers to the utilization of services by the Departments of Education and the local public school districts wihin each state. The states of Colorado, Washington, Utah, South Dakota, Wyoming, Montana and Idaho have agreed to continue the services for F.Y. 1972-73 through a contractual arrangement. The states of North Dakota, Kansas and Texas are developing individual state wide information retrieval centers. The states of Wisconsin and Nebraska, however, are currently indicating an interest in receiving services from the Center during the next year.

During the summer of 1971, a two week workshop was held at the Center in Boulder. The objective of the workshop was to bring the representatives from the State Department of Education of each of the ten states and the Superintendent or his representative from the Board of Cooperative Services districts together so that the problems of the retrieval network could be corrected. The results of this workshop are found in Appendix C).

The Information Retrieval Center encourages new uses of the current awareness and information retrieval services for professional growth by interested school districts or educators. For example, school districts with staff newsletters may utilize the current awareness services as a source of materials for articles, curriculum and district-wide programs.

Central office administrators, building principals, teachers and other staff members may request profiles of information or other specific products for the development of curricula in specific curricula or other problem areas. Research Directors and Title III Project personnel in Colorado are using the information retrieval service as part of their research design and for the development of new programs, projects and proposals.

The process of refinement in the assignment of educational descriptor terms into a workable Bolean algebraic logic becomes a continuous and ongoing program. Considerable progress has been made by the Information Retrieval staff of the Center in working with the descriptor terms. The staff continues to gain expertise in the manipulation of descriptor terms as indicated by the positive evaluation forms returned to the Center by requesters. (Progress of programs, materials, systems design and general refinement of the Center's services are fully documented and are available for examination.)

The entire Information Retrieval staff must have an understanding of the user's problems and work in close cooperation to supply the requester with as much valuable information as needed and in the shortest amount of time possible.

The Information Retrieval Center has experienced a tremendous rate of growth during the last three years. For example, the following monthly statistics indicate the requests

processed and mailed to requesters throughout the regional network:

	1969-70		1970-71		1971-72	
	Automtd	Manual	Auto	Manual	Auto	Manual
January	31	11	45	33	167	33
February	41	24	98	35	521	71
March	30	22	103	85	677	83
April	46	41	123	97	961	63
May	45	43	83	43	789	88
June	37	35	104	93	764	70
July	38	16	118	55	531	43
August	43	22	98	69	360	69
September	71	65	322	66	1,074	86
October	125	75	372	113	1,307	99
November	89	59	383	89	1,116	86
December	72	66	274	102	878	93
TOTALS	668	479	2,128	880	9,145	884

TOTAL SEARCHES PROCESSED 14,184

The type of rapid growth experienced over the past three years becomes very obvious when represented on a chart of this nature.

Another interesting statistic to consider is the growth rate of the various categories of requesters utilizing the retrieval service. For example, the requests for automated Information Retrieval based on the ERIC data base:

	1972	1971	1970
A. Educational practitioners (includes teachers and librarians K-12)	2,198	2,185	455
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	2,777	4,093	553
C. Research and Development Specialists	238	165	44
D. Information Specialists and Dissemination Specialists	640	900	82
E. State Department Officials	346	663	137
F. Others (includes college and graduate students, college professors, USOE Officials)	286	509	164
TOTAL REQUESTS PROCESSED:	6,535*	8,515	1,435**

*Represents January 1972 to June 1972 figures only.

**Represents August 1970 to December 1970 figures only. (This is the period of time that these figures were collected.

Complete sets of monthly reports are listed in Appendix B. in the back of the report.

V. FORMAL EVALUATION OF INFORMATION RETRIEVAL CENTER

Evaluation forms are distributed to every requester with the profile of information or product filling that user's needs. Each profile or information evaluation form (see copy on following page) also has an attached self addressed, stamped envelope to encourage requesters to return evaluation forms. Of the 12,384 searches processed during F.Y. 1971-72, a total of 1,747 evaluation forms were randomly selected and utilized for this evaluation. This (approximately) 15% sampling of evaluation forms is a cross representation of users from the Ten State Regional Network plus additional states utilizing the Retrieval Center services.

As indicated on the evaluation form, both automated and manual searches were presented to requesters with the automated searches far surpassing manual searches processed. A total of 701 manual searches were processed primarily for requesters in Colorado. The limitations on requesters within Colorado only receiving manual searches is because of limited staff (one fulltime reference librarian) with dual responsibilities. Of the 701 manual searches processed a random sample of 475 evaluation forms (68%) were utilized for this study.

The data from the randomly selected evaluation forms was coded, key punched and tabulated by computer. The following tables correspond to the various questions on the evaluation form and are presented for inspection on the following pages.

TO HELP US IMPROVE OUR SERVICES, PLEASE RETURN
THIS COMPLETED EVALUATION FORM.

PLEASE FILL IN COMPLETELY

NAME----------

TITLE----------

SCHOOL NAME----------

ADDRESS----------

CITY----------STATE---------ZIP---------

SCHOOL DISTRICT----------

1. IF YOUR PROFILE CONTAINS COMPUTER SEARCHED MATERIALS:

A. HOW MANY ARE RELEVANT TO YOUR REQUEST?	B. OF THOSE RELEVANT RATE THEIR USEFULNESS.
80-100% ----------	VERY HIGH ----------
60- 80% ----------	HIGH ----------
40- 60% ----------	AVERAGE ----------
20- 40% ----------	LOW ----------
0- 20% ----------	VERY LOW ----------

2. IF YOUR PROFILE CONTAINS MANUALLY SEARCHED MATERIALS (XEROXED ARTICLES, BIBLIOGRAPHIES, PAMPHLETS OR BOOKS):

A. HOW MANY ARE RELEVANT TO YOUR REQUEST?	B. OF THOSE RELEVANT RATE THEIR USEFULNESS.
80-100% ----------	VERY HIGH ----------
60- 80% ----------	HIGH ----------
40- 60% ----------	AVERAGE ----------
20- 40% ----------	LOW ----------
0- 20% ----------	VERY LOW ----------

3. SHOULD FEDERAL FUNDING BE TERMINATED, WOULD YOU BE WILLING TO PAY FOR THESE INFORMATION SERVICES?

A. YES ----------

B. NO ----------

4. PLEASE MAKE COMMENTS, SUGGESTIONS OR CRITICISMS.

TABLE #1 TYPE OF REQUEST (variable #10)

Approximately 51% of the evaluation forms were a user's response to the SID* (Search in Depth) product. Other products in this study include 25% CAT* (Catalog of Computerized Searches), 21% PET* (Packets of Educational Topics) and 3% CAP* (Current Awareness Profiles) searches.

* A description of each product is available in Appendix D.

INFORMATION RETRIEVAL SUMMARY DATA 7/71 THROUGH 6/72 - EVALUATION FORM DATA

VARIABLE NUMBER 10 TYPE OF REQUEST

	CATEGORY CODE	FREQUENCY	PERCENT OF TOTAL	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
NO DATA RECORDED (BLANKS)		3	.17		
SID	1	888	50.92	888	50.92
CAP	2	44	2.52	932	53.44
CAT	3	439	25.17	1371	78.61
PET	4	373	21.39	1744	100.00
TOTAL NUMBER OF CASES EQUALS		1744			

MEAN	VARIANCE	STANDARD DEVIATION	STANDARD ERROR	1ST QURTILE	MEDIAN	3RD QUARTILE	SUM
2.17	1.59	1.26	.03	.99	1.48	3.36	3785.00

LOW SCORE	HIGH SCORE	RANGE
1.00	4.00	3.00

TABLE #2 COMPUTER SEARCH - RELEVANT ABSTRACTS TO REQUESTS (variable #1)

By combining the 60% to 80% and 80% to 100% categories (positive responses) from requesters a total of 55.91% of the users responded very favorably to the abstracts as being relevant to their request. The 20% responses falling in the 40% to 60% category usually indicated in the additional comments section that even though not all of the abstracts received were of value the overall value of the search was still very relevant to their needs.

INFORMATION RETRIEVAL SUMMARY DATA 7/71 THROUGH 6/72 - EVALUATION FORM DATA

VARIABLE NUMBER 1 COMPUTER SEARCH: RELEVANT ABSTRACTS

	CATEGORY CODE	FREQUENCY	PERCENT OF TOTAL	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
NO DATA RECORDED (BLANKS)		208	11.91		
0-20(	1	153	9.95	153	9.95
20-40(	2	214	13.91	367	23.86
40-60(	3	311	20.22	678	44.08
60-80(	4	469	30.49	1147	74.58
80-100(	5	391	25.42	1538	100.00
TOTAL NUMBER OF CASES EQUALS		1538			

MEAN	VARIANCE	STANDARD DEVIATION	STANDARD ERROR	1ST QUARTILE	MEDIAN	3RD QUARTILE	SUM
3.48	1.63	1.28	.03	2.56	3.69	4.62	5345.00

LOW SCORE	HIGH SCORE	RANGE
1.00	5.00	4.00

TABLE #3 MANUAL SEARCH - RELEVANT SEARCHES FOR REQUESTERS (variable #2)

By combining the 60% to 80% and 80% to 100% categories (positive responses) from requesters a total of 73% of the users responded very favorably to the documents as being relevent to the request. A larger majority of requesters found the manually searched materials supporting computer searches to be more valuable than just the computer search by itself.

INFORMATION RETRIEVAL SUMMARY DATA 7/71 THROUGH 6/72 - EVALUATION FORM DATA

VARIABLE NUMBER 2 MANUAL SEARCH: RELEVANT ABSTRACTS

	CATEGORY CODE	FREQUENCY	PERCENT OF TOTAL	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
NO DATA RECORDED (BLANKS)		875	50.09		
0-20(	1	55	6.31	55	6.31
20-40(	2	61	7.00	116	13.30
40-60(	3	120	13.76	236	27.06
60-80(	4	284	32.57	520	59.63
80-100(	5	352	40.37	872	100.00
TOTAL NUMBER OF CASES EQUALS		872			

MEAN	VARIANCE	STANDARD DEVIATION	STANDARD ERROR	1ST QUARTILE	MEDIAN	3RD QUARTILE	SUM
3.94	1.39	1.18	.04	3.35	4.20	4.88	3433.00

LOW SCORE	HIGH SCORE	RANGE
1.00	5.00	4.00

TABLE #4 RATING USEFULNESS OF RELEVANT ABSTRACTS (variable #3)

The abstracts retrieved from the entire data base by the Information Retrieval Specialist are rated by requesters as having a very high utility. A total of 68% of the users responded by marking the last two categories (high and very high) to indicate the value of the research and resource materials received. Only 10% of the requesters felt the abstracts had a very low or low utility. Thus, a very high percentage of satisfied requesters also indicates the value of the research and resource materials in the ERIC data base.

INFORMATION RETRIEVAL SUMMARY DATA 7/71 THROUGH 6/72 - EVALUATION FORM DATA

VARIABLE NUMBER 3 COMPUTER SEARCH: ABSTRACT USEFULNESS

	CATEGORY CODE	FREQUENCY	PERCENT OF TOTAL	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
NO DATA RECORDED (BLANKS)		776	44.42		
VERY LOW	1	37	3.81	37	3.81
LOW	2	63	6.49	100	10.30
AVERAGE	3	210	21.63	310	31.93
HIGH	4	422	43.46	732	75.39
VERY HIGH	5	239	24.61	971	100.00
TOTAL NUMBER OF CASES EQUALS		971			

MEAN	VARIANCE	STANDARD DEVIATION	STANDARD ERROR	1ST QUARTILE	MEDIAN	3RD QUARTILE	SUM
3.79	1.02	1.01	.03	3.18	3.92	4.59	3678.00

LOW SCORE	HIGH SCORE	RANGE
1.00	5.00	4.00

TABLE #5 RATING USEFULNESS OF RELEVANT MANUAL SEARCHES (variable #4)

The manually searched materials retrieved by the Reference Librarian at the University of Colorado Library (and other local sources), rate as having a very high utility. A total of 75% of the requesters indicated a high to very high response to the value of these materials. Only 8% of all requesters responded by indicating a very low to low utility for the materials.

INFORMATION RETRIEVAL SUMMARY DATA 7/71 THROUGH 6/72 - EVALUATION FORM DATA

VARIABLE NUMBER 4 MANUAL SEARCH: ABSTRACT USEFULNESS

	CATEGORY CODE	FREQUENCY	PERCENT OF TOTAL	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
NO DATA RECORDED (BLANKS)		1272	72.81		
VERY LOW	1	14	2.95	14	2.95
LOW	2	19	4.00	33	6.95
AVERAGE	3	86	18.11	119	25.05
HIGH	4	207	43.58	326	68.63
VERY HIGH	5	149	31.37	475	100.00
TOTAL NUMBER OF CASES EQUALS		475			

MEAN	VARIANCE	STANDARD DEVIATION	STANDARD ERROR	1ST QUARTILE	MEDIAN	3RD QUARTILE	SUM
3.96	.92	.96	.04	3.50	4.07	4.70	1883.00

LOW SCORE	HIGH SCORE	RANGE
1.00	5.00	4.00

TABLE #6 INDIVIDUALS WILLING TO PAY FOR INFORMATION RETRIEVAL SERVICES (variable #5)

Of the 1,475 responses to this question on the evaluation form, 75% of the responses indicated a willingness to pay for retrieval services. The evaluation form did not indicate a specific cost for the various products. People undoubtedly expect to pay approximately the same prices as are currently being charged for the products.

INFORMATION RETRIEVAL SUMMARY DATA 7/71 THROUGH 6/72 - EVALUATION FORM DATA

VARIABLE NUMBER 5 WILLING TO PAY

	CATEGORY CODE	FREQUENCY	PERCENT OF TOTAL	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
NO DATA RECORDED (BLANKS)		271	15.51		
YES	1	1095	74.24	1095	74.24
NO	2	380	25.76	1475	100.00
TOTAL NUMBER OF CASES EQUALS		1475			

MEAN	VARIANCE	STANDARD DEVIATION	STANDARD ERROR	1ST QUARTILE	MEDIAN	3RD QUARTILE	SUM
1.26	.19	.44	.01	.84	1.17	1.63	1865.00

LOW SCORE	HIGH SCORE	RANGE
1.00	2.00	1.00

TABLE #7 ADDITIONAL COMMENTS (variable #6)

The final item on the evaluation form asks for additional comments, suggestions or criticisms to be listed. A total of 47% of the evaluation forms were returned with written comments (the majority of which are very positive). These comments are available for perusal to appropriate personnel upon request.

INFORMATION RETRIEVAL SUMMARY DATA 7/71 THROUGH 6/72 - EVALUATION FORM DATA

VARIABLE NUMBER 6 ADDITIONAL COMMENTS

	CATEGORY CODE	FREQUENCY	PERCENT OF TOTAL	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
NO DATA RECORDED (BLANKS)		8	.46		
YES	1	811	46.64	811	46.64
NO	2	928	53.36	1739	100.00
TOTAL NUMBER OF CASES EQUALS		1739			

MEAN	VARIANCE	STANDARD DEVIATION	STANDARD ERROR	1ST QUARTILE	MEDIAN	3RD QUARTILE	SUM
1.53	.25	.50	.01	1.04	1.56	2.03	2667.00

LOW SCORE	HIGH SCORE	RANGE
1.00	2.00	1.00

TABLES #8-9 (Variables 7 and 8)

Tables 8 and 9 are a breakdown of the states utilized in the random sample including the Seven State Network represented by NERCOE*.

* NERCOE - the New England Resource Center for Occupational Education, 55 Chapel Street, Newton, Massachusetts 02160

INFORMATION RETRIEVAL SUMMARY DATA 7/71 THROUGH 6/72 - EVALUATION FORM DATA

VARIABLE NUMBER 8 STATES IN NEW ENGLAND RESOURCE CENTER FOR OCCUPATIONAL EDUC

	CATEGORY CODE	FREQUENCY	PERCENT OF TOTAL	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
STATE NOT IN NERCOE	0	1630	93.36	1630	93.36
NERCOE >IN GENERAL*	1	57	3.26	1687	94.62
CONNECTICUT	2	3	.17	1690	94.79
MAINE	4	11	.63	1701	97.42
MASSACHUSETTS	5	10	.57	1711	98.00
NEW HAMPSHIRE	6	6	.34	1717	98.34
RHODE ISLAND	9	1	.06	1718	98.40
VERMONT	10	27	1.55	1745	99.94
WASHINGTON D.C.	11	1	.06	1746	100.00
TOTAL NUMBER OF CASES EQUALS		1746			

MEAN	VARIANCE	STANDARD DEVIATION	STANDARD ERROR	1ST QUARTILE	MEDIAN	3RD QUARTILE	SUM
.28	1.99	1.41	.03	.27	.54	.80	483.00

LOW SCORE	HIGH SCORE	RANGE
0.00	11.00	11.00

INFORMATION RETRIEVAL SUMMARY DATA 7/71 THROUGH 6/72 - EVALUATION FORM DATA

VARIABLE NUMBER 7 STATE

	CATEGORY CODE	FREQUENCY	PERCENT OF TOTAL	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
COLORADO	3	678	41.57	678	41.57
IDAHO	7	158	9.69	836	51.26
IOWA	9	1	.06	837	51.32
KANSAS	10	11	.67	848	51.99
MINNESOTA	12	1	.06	849	52.05
MONTANA	13	3	.18	852	52.24
NEVADA	15	1	.06	853	52.30
OREGON	18	291	17.84	1144	70.14
SOUTH DAKOTA	19	85	5.21	1229	75.35
TENNESSEE	20	1	.06	1230	75.41
TEXAS	21	29	1.78	1259	77.19
UTAH	22	125	7.66	1384	84.86
WASHINGTON	24	191	11.71	1575	96.57
WISCONSIN	26	3	.18	1578	96.75
WYOMING	27	53	3.25	1631	100.00
TOTAL NUMBER OF CASES EQUALS		1631			

MEAN	VARIANCE	STANDARD DEVIATION	STANDARD ERROR	1ST QUARTILE	MEDIAN	3RD QUARTILE	SUM
12.05	78.83	8.88	.22	3.10	7.37	19.43	19650.00

LOW SCORE	HIGH SCORE	RANGE
3.00	27.00	24.00

TABLE #10 (variable #9)

Table #10 is a monthly listing of evaluation forms utilized in the random sample.

INFORMATION RETRIEVAL SUMMARY DATA 7/71 THROUGH 6/72 - EVALUATION FORM DATA

VARIABLE NUMBER 9 DATE OF REQUEST

	CATEGORY CODE	FREQUENCY	PERCENT OF TOTAL	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
NO DATA RECORDED (BLANKS)		93	5.32		
JULY 71	1	64	3.87	64	3.87
AUGUST 71	2	85	5.14	149	9.01
SEPTEMBER 71	3	145	8.77	294	17.78
OCTOBER 71	4	239	14.45	533	32.22
NOVEMBER 71	5	206	12.45	739	44.68
DECEMBER 71	6	188	11.37	927	56.05
JANUARY 72	7	157	9.49	1084	65.54
FEBRUARY 72	8	127	7.68	1211	73.22
MARCH 72	9	173	10.46	1384	83.68
APRIL 72	10	143	8.65	1527	92.32
MAY 72	11	104	6.29	1631	98.61
JUNE 72	12	23	1.39	1654	100.00
TOTAL NUMBER OF CASES EQUALS		1654			

MEAN	VARIANCE	STANDARD DEVIATION	STANDARD ERROR	1ST QUARTILE	MEDIAN	3RD QUARTILE	SUM
6.23	8.03	2.83	.07	4.00	5.97	8.67	10305.00

LOW SCORE	HIGH SCORE	RANGE
1.00	12.00	11.00

VI. CONCLUSIONS

The key to a significant and relevant subject searching service for all educators is for the Retrieval staff to thoroughly understand the questions or requests for information and to interpret them as precisely as possible. When the Information Retrieval Center staff utilizes the correct ERIC descriptor terms (computer retrieval), accurate subject headings (manual retrieval), concise reporting and a detailed analysis of the question, the requester can be assured of receiving quality documents and relevant materials matching his specific request.

Through the experiences of the Pilot (for year 1970-71) and Operation Phases (for year 1971-72) of the program, it is very apparent that the Center's Information Specialists are extremely qualified to interpret the requester's needs. This ability increases significantly with the Information Specialists' experience and familiarity with the descriptor terms and the scope of the information data base.

Another indication of the success of the Information Retrieval Center can be seen in the regional concept of involving several states in the processing and retrieval of research and resource materials.

Of the ten original states in the program F.Y. 1971-72 (Washington, Oregon, Utah, Idaho, Montana, Colorado, Wyoming, South Dakota, North Dakota, and Kansas), only three of those

states will not be receiving services next year. Oregon, Kansas and North Dakota are developing their own retrieval systems and will not be under contract. The remaining seven states have all signed contracts (varying in amounts) to participate in the regional information network next year. Also, the states of Nebraska and Wisconsin are in the process of exploring a tie-in to the regional network. The state of Wisconsin is currently exploring a possible tie-in through a CRT Scope (terminal) with this Center for F.Y. 1972-73.

Even though there is a movement toward state information retrieval centers, the success and results of this Ten State Regional program can clearly be seen by looking at the statistics and written comments from the requesters as presented in this report.

APPENDIX A

LETTER FROM DR. LEE BURCHINAL

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

February 2, 1971

Dr. Walter Turner
Director, Northern Colorado
Board of Cooperative Educational Services
970 Aurora Avenue
Boulder, Colorado 80302

Dear Dr. Turner:

Mr. Hoover has informed me about the improved services the Northern Colorado Board of Cooperative Educational Services is now providing. We are impressed by the continued high performance and imagination of your staff, and are pleased to have helped, in a modest way, with the expansion of your services to other States in your region.

I wish we could provide additional funds to each State agency for initial use of your services, but our budgets simply are not capable of supporting such efforts. Except for support of several pilot State dissemination efforts as in Oregon, Utah, and South Carolina, it is unlikely that further support from the National Center for Educational Communication will be made available to State agencies.

I hope State agencies will examine their present information collection and dissemination services closely to determine how they could improve these efforts through use purchase of your services within their existing budgets. I wager many State, and local agency communication efforts too, could be carried more effectively and less expensively if staff were to use your services routinely.

My best wishes.

Sincerely yours,

Lee G. Burchinal
Assistant Commissioner
National Center for
Educational Communication

APPENDIX B

MONTHLY REPORTS

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for July, 1971

I. Monthly Highlights

July 1, 1971

Presentation - A graduate class of 20 students from the University of Colorado received a transparency presentation discussing ERIC's products and services and the utilization of the Information Retrieval Center. This class was comprised of Elementary and Secondary School Librarians.

July 13, 1971

Presentation - An advanced seminar of 15 students in "The Change Agent and Educational Media", from the University of Colorado, received a presentation on the utilization of the Information Retrieval Center, ERIC products and services and the role of change agents in the field of automated information retrieval.

July 15, 1971

Visitation - Dr. Max Morrison, Iowa Department of Education, visited the Center in order to gain a better understanding of the four new information products and services and the overall

operation of the Information Retrieval Center.

Presentation - Approximately 30 Secondary Mathematics Teachers were presented a thorough discussion regarding the use of ERIC products and services, the operation of the Retrieval Center and how to request the four new Information Retrieval products from the Center.

July 16

Meeting - Met with Mrs. Joan Knaub to discuss the forthcoming brochure describing ERIC and how to establish an Information Retrieval Center.

July 20

Presentation - A transparency presentation was given to 35 graduate students in a course in "Curriculum Change" from the University of Colorado. An overview of ERIC products and services and how to utilize the Information Retrieval Center was presented. The college professor required each member of the class to utilize the Information Retrieval services and as a result 45 requests were processed from this class.

July 23

Presentation - A workshop involving 60 Secondary Teachers in the study of "Educational Innovation" received a transparency presentation discussing ERIC products and services and the utilization of Information Retrieval materials.

Presentation - A graduate class from Northern Colorado University traveled to the Retrieval Center to receive a transparency

presentation, tape and slide presentation, overview of ERIC products and services and how to most efficiently utilize the Information Retrieval Center. The four new products were thoroughly discussed and methods and techniques for retrieving information were presented to this graduate class on Vocational Education.

July 26 - 30, 1971

Automated Information Retrieval Workshop - Representatives from the State Departments of Education in the WAVE I States of Oregon, Washington, Utah, Colorado and South Dakota were present during the week long workshop. The WAVE II States of Idaho, Montana, Kansas and North Dakota were also present in order to explore the possibility of utilizing the Information Retrieval Center's services for F.Y. 71-72 on a no charge basis. Mr. Charles Hoover, U.S. Office of Education, was present on Monday and Tuesday during which time he made several presentations and served as a consultant to the workshop. His valuable input to the conference resulted in many group discussions and interaction sessions. A better understanding of the National Center For Educational Communication and plans for ERIC's future were discussed by Mr. Hoover. Other Agenda items (see enclosed Agenda) included presentations by the Information Retrieval Staff and by each of the WAVE I State Representatives. Evaluations conducted on the workshop indicate all participants were very pleased with the results of the workshop, were most irterested in Mr. Hoover's presentations and now have a clearer understanding of the capabilities and limitations of the Information Retrieval Center. Copies of the conference evaluation report will be available upon request.

INFORMATION RETRIEVAL WORKSHOP

July 26-30, 1971

Northern Colorado Educational BOCS
1750 - 30th, Crossroads East, Suite 48
Boulder, Colorado 80302

A G E N D A

Monday, July 26, 1971

* 8:00 - 10:30	Mr. McCleary: Introduction and Welcome
	Dr. Turner: Welcome
	Mr. McCleary: Overview of Workshop
	Introduction:
	Mr. Charles Hoover Director ERIC U.S. Office of Education Washington, D. C.
* 10:30 - 10:45	Coffee Break
* 10:45 - 12:00	Daily staff meeting for processing requests
12:00 - 1:00	Lunch (Informal) Transportation to BOCS
1:00 - 4:30 (Daily)	Individualized staff sessions
	WAVE I States:

Rocky Petrocchi	- Jim Simpson, S.D.
Roy Tally	- Jack Bech, Oregon
Elise Albright	- Nancy Motomatsu
Sharon Georgie	Washington
Mary Brown	- Kathy Wallentine
Linda Simons	- Utah

In-House Processing of Requests:

1. Logic writing
2. Use of RIE
3. Use of CIJE
4. Use of ERIC Tools

    A. Thesaurus
    B. Catalogues
    C. Searches

        1. Descriptors
        2. Identifiers

5. Processing Automated Requests
6. Processing Manual Requests

WAVE II States:

Romie Lundquist - Ruth Seydel, Carol Anderson
Bill McCleary - Idaho
Margaret Brown, Mont.
Arlin Morgan, Kansas
Lowell Jensen, N.D.

Emphasis for the afternoon sessions with WAVE II States will concentrate on:

1. Familiarization with Information Retrieval Center.

   A. Transparency Presentation
   B. Tape and slide show
   C. Explanation of four basic products

2. Description of Information Network
3. Forms utilization and handling.
4. Capabilities and limitations of Retrieval Center.
5. Data Base
6. Evaluation
7. State Information Retrieval Network assignment due Friday.

6:30 - 7:30 Flagstaff House. Social Hour

7:30 - Dinner (Rides will be available from your motel.)

Tuesday, July 27, 1971

8:00 - 9:00 Mr. Charles Hoover
ERIC, USOE

9:00 - 10:00 Lundquist - Simons - Georgie

1. New Products - Overview

   A. CAT
   B. CAP
   C. PET

2. Utilization of Guides
3. Order forms
4. Explanation of Dissemination of Information Retrieval materials.
5. Work Activity

10:00 - 10:15 Coffee Break

10:15 - 11:00 Explanation of State Information Pro-

	cessing Networks (Nancy Motomatsu, Washington).
11:00 - 12:00	Daily Staff Meeting - processing requests.
12:00 - 1:00	Lunch
1:00 - 4:30	WAVE I States continue with individualized logic writing sessions. WAVE II States continue concentration on familiarization with Information Retrieval Program.

Wednesday, July 28, 1971

8:30 - 10:00	Albright - Brown 1. CIJE A. As a supplemental product. B. Utilization. 2. Manual Search Techniques (Optional Field Trip) 3. Inhouse and Outhouse Searches 4. Capabilities/Limitations ERIC-RIE
10:00 - 10:15	Coffee Break
10:15 - 11:00	Explanation of State Information Processing Networks (K. Wallentine, Utah).
11:00 - 12:00	Daily Staff Meeting - processing requests.
12:00 - 1:00	Lunch
1:00 - 4:30	WAVE I States continue with individualized logic writing sessions. WAVE II States continue concentration on familiarization with Information Retrieval Program.

Thursday, July 29, 1971

8:30 - 10:00	Tally, Stewart, McCleary 1. Monthly Reports 2. Mailing Costs 3. Turnaround Time 4. Product Dissemination 5. SID - Search In Depth 6. User Interrogation 7. Forms Control/Record Keeping (Possible Standardization)
10:00 - 10:15	Coffee Break

10:15 - 11:00	Explanation of State Information Processing Networks (Jack Bech - Oregon).
11:00 - 12:00	Daily Staff Meeting - processing requests.
12:00 - 1:00	Lunch
1:00 - 2:30	WAVE I States continue with individualized logic writing sessions. WAVE II States continue concentration on familiarization with Information Retrieval Program.
3:00	Picnic - Brainard Lake, Rocky Mountains

Friday, July 30, 1971

8:30 - 10:00	Petrocchi - Bair 1. Terminals (South Dakota) 2. Data Processing Applications 3. Hardware - Software 4. Scopes (Future) 5. Microfiche Readers 6. Microfiche Duplicators/Reproduction
10:00 - 10:15	Coffee Break
10:15 - 11:00	Explanation of State Information Processing Networks (Jim Simpson, S.D.).
11:00 - 12:00	Daily Staff Meeting- processing requests.
12:00 - 1:00	Lunch
1:00 - 2:30	Completion of WAVE I. Completion of logic writing assignment. WAVE II completion of State Information Network assignment.
2:30 - 3:30	Evaluation and closing.

Note:

* Sessions at Golden Buff Conference Room

All clock times are flexible.

	Current Month	Running Total Since July, 1970
II. Microfiche' Distribution:		
A. Microfiche' checkout out from the Center on a two week basis	147 sets	1060
B. Microfiche' duplicated (on a very limited basis)	50	364
III. Requests for Automated Information Retrieval based on the ERIC Data Base:		
A. Educational practitioners (includes teachers and librarians K-12)	148	1805
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	275	2406
C. Research and Development Specialists	6	115
D. Information Specialists and Dissemination Specialists	38	520
E. State Department Officials	44	586
F. Others (includes college and graduate students, college professors, USOE officials)	20	511
TOTAL FOR	531	5943

IV. *Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID		
Wyoming	14	7	71	6	98	381
Utah	11	7	20	10	47	982
Oregon	57	9	19	25	110	579
Washington	5	0	2	9	16	651
South Dak.	7	20	5	22	54	387
Colorado	68	10	29	95	203	2818
Nevada	0	0	0	0	0	39
Idaho	0	0	0	0	0	23
Montana	0	0	0	0	0	1
Kansas	0	0	0	0	0	0
Other	2	0	0	1	3	82
TOTAL FOR JULY	164	53	146	168	531	5943

V. Total Manual Searches	43	933

	Current Month	Running Total Since Feb., 1971
VI. Requests for PET, CAP, CAT, and SID		
Not reflected in total.		
A. Packets of Educational Topics (PET)	164	1141
B. Current Awareness Profiles (CAP)	53	590
C. Catalog of Computerized Searches (CAT)	146	1140
D. Individualized Searches (Search In-Depth) (SID)	168	3072
TOTAL FOR JULY	531	5943
VII. PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)		
(Since 3/1/71 Only)		
**A. Briefs	0	1077
**B. Kits	0	42
**C. Microfiche Duplicated Sets	0	5

* Part IV requests are included in the total

** (PREP) is disseminated within the 7 school districts of the BOCS ONLY.)

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for August, 1971

I. Monthly Highlights

August 3, 1971

Meeting - Met with the new Colorado Department of Education ESEA Title III Assistant Director to discuss the Information Retrieval network and methods and procedures for processing the four new Information Retrieval products.

August 4, 1971

Workshop - McKee Hall, University of Northern Colorado, Greeley: Workshop for teachers of Educationally Handicapped. Discussed ERIC products and services and use of Information Retrieval services. Approximately 35 participants. (Simons)

August 9 - 13, 1971

Multi-Media Workshop - As a part of the activities of the Northern Colorado Educational Board of Cooperative Services, a workshop in the utilization of multi-media for teachers, librarians and administrators was conducted under the auspices of the BOCS (see enclosed activity schedule). The workshop involved 90 people. The purpose of this workshop was to

familiarize teachers (both elementary and secondary), supervisors and administrators with the complex area of multi-media. Emphasis was placed on one half day of formal instruction and one half day in the production of materials and/or program instruction in the use of audio-visual equipment. "Hands-on" and production experience was stressed through the entire workshop.

Topics Covered in Workshop

1. Correlation of 16mm. Films and Other Non-Print Media with Curriculum.
2. Using the Video Tape Recorder in the Classroom.
3. Constructing Curriculum Media Kits.
4. The Camera in the Classroom.
5. Using Overhead Projector at Secondary Level.
6. Making a Multi-Media Presentation Work in the Classroom.
7. Teacher-Made Media Materials and Their Use in the Classroom.
8. Use of Media in Teaching About Drugs and Drug Abuse.
9. Familiarizing Teachers with Audio-visual Equipment Available.
10. Automated Information Retrieval -- Its Uses for the Classroom Teacher, the Classroom Coordinator, the Principal, and other Administrative Staff Members of the ERIC Data Base and Research and Resource Materials Available to the Classroom Teachers.

A considerable amount of time was spent discussing ERIC products and services and how to utilize the Information Retrieval Center. Workshop participants were encouraged to make requests especially pertaining to the area of multi-media and audio-visual education.

A number of field trips and related activities were also presented to workshop participants. Evaluation conducted on the workshop indicated a very successful program with the objectives being accomplished.

August 18, 1971

Evaluation Follow-up - Dwayne Johnson, member of the Indiana University Evaluation Team (ERIC Evaluation of Products and Services), visited our Center as a follow-up to the original evaluation information obtained through earlier evaluation forms, conferences and meetings.

August 25, 1971

Presentation - Education Center, Boulder Valley Public Schools, secondary principals (approximately 15); all principals will set up individual building presentation schedules through Mr. Noble Freden in cooperation with BOCS. (Simons)

August 25, 1971

Presentation - Longmont Jr.-Sr. High Auditorium: Full secondary staff (approximately 275, contact: Sec. Dir. Bergman). A transparency presentation was presented to the group explaining ERIC products and services and how to utilize the Information Center.

August 26, 1971

Presentation - NCEBOCS conference room: Total NCEBOCS staff in-house; in-service presentation of all components by each Director. Discussion of long range plans and future of BOCS.

August 27, 1971

Meeting - Met with Mrs. Joan Knaub to discuss the final draft of the brochure being written for the National Center for Educational Communication. Rough draft to be mailed by the end of the month.

August 27, 1971

Presentation - Conference room, Boulder Valley Public Schools. The consultants (approximately 10) of the districts received a presentation on how to involve more teachers and administrators in use of Information Retrieval services. (Simons)

August 30, 1971

Presentation - New Fairview Senior High faculty received an overview of the BOCS operation and how to utilize the products and services of the Information Retrieval Center.

	Monday	Tuesday		Wednesday	Thursday	Friday
9:00-10:30	Room A Registration & Administrative Details Mr. McCleary, Mr. Knight & Dr. Seager	Rm. A 5E The Camera in the classroom Dr. Bowman	Rm. E 5S - Using the Video Tape recorder in the classroom Dr. Perry	E	S	9:00-9:30 Set up projects
Break				United Airlines Training Center Field Trip 8:55-10:45 - Wednesday (40 people) *KRMA Field Trip 8:55-10:45 (30 people each day)		Rm. C 11S Correlating filmstrips, 8MM loops & study prints with the instructional program EBF - Mr. Epperson & Mr. Mahan Rm. A 11E Correlating 16MM films with the curriculum Mr. Monet Sanford
10:45-12:00	Rm. A 1E 1S B O C S Mr. McCleary	Rm. A 6S The Camera in the classroom Dr. Bowman	Rm. E 6E - Using the Video Tape recorder in the classroom Dr. Perry	Individual Project Work		
NOON						
1:00-2:30	Rm. B 2S Constructing Curr. Media kits Mr. Wolfe Mrs. Schrieber Rm. D 2E Practicum Equipment Operation-Production Materials-Daily Equipment	Rm. A 7S Teacher made materials in classroom Mrs. Blair Rm. B 7E Teacher made materials in classroom Mr. Knight	Rm. C 9E Use of Media in Teaching about Drugs Mr. Whisler Rm. A 9S Making A MM presentation work in the classroom Mr. Wolfe Mr. Knight	Equipment Operation and <u>Project Work</u> Projects to be set up by 9:30 Friday morning.		Viewing of Projects
2:30-4:00	Rm. B 3E Constructing Curr. Media kits Mr. Wolfe Mrs. Schrieber Rm. D 3S Practicum Equipment Operation-Production Materials-Daily Equipment	Rm. B 8E Using the Overhead Projector at Elem. level Mrs. Gazewood Dr. Seager Rm. C 8S Using the Overhead Projector at Second. level Mrs. Smith	Rm. C 10S Use of Media in Teaching about Drugs Mr. Whisler Rm. A 10E Making A MM presentation work in the classroom Mr. Wolfe Mr. Knight			
4:00-4:30	Film Fair Intro. & Equipment Useage Cont. on Mon.	*Those who are not able to go to the KRMA Field Trip may work on their projects. --Film Fair runs concurrently from 1 to 4 in Rooms H, I, J, and K, on Tues., Wed., Thurs., and Friday.				

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B14

	Current Month	Total Since July, 1970
II. Microfiche' Distribution:		
A. Microfiche' checkout out from the Center on a two week basis	62	1122
B. Microfiche' duplicated (on a very limited basis)	62	426
III. Requests for Automated Information Retrieval based on the ERIC Data Base:		
A. Educational practitioners (includes teachers and librarians K-12)	138	1943
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	130	2536
C. Research and Development Specialists	9	124
D. Information Specialists and Dissemination Specialists	24	544
E. State Department Officials	33	619
F. Others (includes college and graduate students, college professors, USOE officials)	26	537
TOTAL FOR	360	6303

IV. *Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID		
Wyoming	0	0	1	5	6	387
Utah	2	1	21	20	44	1026
Oregon	31	4	44	47	126	705
Washington	0	1	0	18	19	670
South Dak.	9	19	1	16	45	432
Colorado	6	3	24	69	102	2920
Nevada	0	0	0	0	0	39
Idaho	0	0	0	0	0	23
Montana	0	0	0	1	1	2
Kansas	0	0	0	0	0	0
Other	6	0	7	4	17	99
TOTAL FOR	54	28	98	180	360	6303

		Current Month	Running Total Since Feb., 1971
V.	Total Manual Searches	69	1002
VI.	Requests for PET, CAP, CAT, and SID		
	Not reflected in total.		
	A. Packets of Educational Topics (PET)	54	1195
	B. Current Awareness Profiles (CAP)	28	618
	C. Catalog of Computerized Searches (CAT)	98	1238
	D. Individualized Searches (Search In-Depth) (SID)	180	3252
	TOTAL FOR	360	6303
VII.	PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)		
	(Since 3/1/71 Only)		
	**A. Briefs	0	1077
	**B. Kits	0	42
	**C. Microfiche Duplicated Sets	0	5

* Part IV requests are included in the total

** (PREP) is disseminated within the 7 school districts of the BOCS ONLY.)

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for September, 1971

I. Monthly Highlights

September 1

Presentation - A presentation on ERIC products and services was given to Special Education Teachers at Boulder Valley Public Schools. A display of Northern Colorado Educational Board of Cooperative Services materials was presented. There were approximately 50 participants. (Simons)

September 2

Presentation - Nederland Junior-Senior High School, Boulder Valley Public Schools staff met at the BOCS offices for a presentation of ERIC products and the services of the Information Retrieval Center. (Simons)

September 3

Visit - Mr. Charles Haughey, Director of the National Center for Information Resources, U.S. Office of Education, visited the Information Retrieval Center for the purpose of developing an understanding of the operation of the Information Retrieval Center and the uses being made of the ERIC Data Base. Mr. Haughey also

attended a general orientation session including an overview of the Centers products and services and an introduction to the daily meetings conducted by the Information Retrieval staff. Mr. Haughey's visit provided the opportunity for an exchange of ideas and a discussion of future techniques and methods for processing educational research and resource information. Mr. Haughey also spoke to the BOCS Advisory Board providing an excellent opportunity for the Superintendents and Assistant Superintendents of the seven districts comprising the Board of Cooperative Services with a better understanding of the U.S. Office of Education and the scope of ERIC operations and services.

September 3

Presentation - ERIC products and services were discussed at a meeting with the St. Vrain RE-1J Elementary Principals in Longmont, Colorado. Approximately 15 Principals were present for the meeting. (Simons)

September 13-16

Presentation - Combined meetings for the entire Poudre R-1 School District, Fort Collins, Colorado, which includes 32 schools, was conducted during this four day presentation period. ERIC products and the use of the Information Retrieval Center's services were discussed in all of the presentations. (Simons)

September 14

Presentation - Elementary Principals and Consultants in Adams #12, Northglenn, Colorado, received a presentation on Northern Colorado Educational BOCS services including ERIC products and the use of the Information Retrieval Center. (Simons)

September 14-17

Conference - Mr. Roy Tally and I attended the ERIC Tape Users Conference, Holiday Inn, Silver Springs, Maryland. A most worthwhile conference providing the opportunity for in-depth discussions of common problems faced by other Directors of Information Retrieval Centers and programs. This well-structured Conference also provided opportunities for small group interaction and some problem solving with individuals having similar responsibilities. (I feel this was the best ERIC Conference I have attended to date).

September 16

Presentation - The faculty at Broomfield High School, Broomfield, Colorado, received a presentation of NCEBOCS services, ERIC products and the use of the Information Retrieval services. (Simons)

September 17

Presentation - A presentation was made to the entire staff of the Colorado Department of Education, Denver, Colorado on ERIC products and services and the utilization of the Information Retrieval services. (Simons)

September 17

Meeting - While attending the Tape Users Conference in Washington, D.C., I met with Mr. Charles Smith, Associate Director, ERIC Clearinghouse on Library and Information Science. This meeting provided the opportunity to discuss a forthcoming presentation regarding the Information Retrieval Center and the use of the ERIC automated Data Base while serving a ten state regional network. This presentation is scheduled in conjunction with the American Society for Information Science 34th Annual Meeting to be held November 7-11, 1971 in Denver.

September 21

Meeting - Met with Mrs. Joan Knaub to discuss changes necessary for the final draft of the brochure she is writing for the National Center for Educational Communication.

September 22

Meeting - Met with Dr. Peter W. Greenwood and Dr. Dan Willier, Representatives from the Management Sciences Department, The Rand Corporation, to discuss an evaluation being conducted on the ERIC Clearinghouse network by Rand.

September 23

Presentation - A video tape presentation of the overall NCEBOCS services and most specifically the utilization of ERIC was video taped in Admas #50, Westminster, Colorado. The video tape will be used in district-wide in-service programs. (Simons)

September 27-30

Presentation - Several presentations were made to the Thompson R-2J Loveland, Colorado schools. Discussion about NCEBOCS services and ERIC products and services were held at 11 different elementary and secondary schools. (Simons)

September 28

Received a letter of confirmation from the Texas Educational Renewal Center, Austin, Texas (as written by Mrs. Dorothy Mueller), indicating a definite interest in becoming affiliated with the Information Retrieval Center of the Board of Cooperative Services, as a WAVE II Center. This offer does not include the total State of Texas.

Phone calls, to date, indicate that the States of North Dakota and Kansas will be sending letter of confirmation for participation as WAVE II States in the immediate future. These three states will join Idaho who is already committed to the utilization of the Information Retrieval Center's products and services.

September 30

Meeting - Met with Dr. Ferucio Freschet (Director, Educational Services) and Dave Gustavson both representing the New England Resource Center for Occupational Education regarding a contract for use of the products and services of the Information Retrieval Center. A contract was presented to Dr. Freschet which will, in turn, be presented to his Board of Directors to determine if a one year contractual arrangement will be forthcoming.

	Current Month	Total Since July, 1970
II. Microfiche' Distribution:		
A. Microfiche' checkout out from the Center on a two week basis	111	1233
B. Microfiche' duplicated (on a very limited basis)	111	537
III. Requests for Automated Information Retrieval based on the ERIC Data Base:		
A. Educational practitioners (includes teachers and librarians K-12)	319	2262
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	535	3071
C. Research and Development Specialists	19	143
D. Information Specialists and Dissemination Specialists	67	611
E. State Department Officials	99	718
F. Others (includes college and graduate students, college professors, USOE officials)	35	572
TOTAL FOR	1074	7377

IV. *Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID		
Wyoming	3	7	10	9	29	416
Utah	288	24	39	16	367	1393
Oregon	40	2	31	32	105	810
Washington	17	41	15	22	95	765
South Dak.	1	56	5	3	65	497
Colorado	49	61	120	113	343	3263
Nevada	0	0	0	0	0	39
Idaho	0	0	0	1	1	25
Montana	12	0	0	0	12	13
Kansas	0	0	0	0	0	0
Other	9	6	36	6	57	156
TOTAL FOR	419	197	256	202	1074	7377

V. Total Manual Searches	86	1088

	Current Month	Running Total Since Feb., 1971
VI. Requests for PET, CAP, CAT, and SID		
Not reflected in total.		
A. Packets of Educational Topics (PET)	419	1614
B. Current Awareness Profiles (CAP)	197	815
C. Catalog of Computerized Searches (CAT)	256	1494
D. Individualized Searches (Search In-Depth) (SID)	202	3454
TOTAL FOR	1074	7377
VII. PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)		
(Since 3/1/71 Only)		
**A. Briefs	0	1077
**B. Kits	2	44
**C. Microfiche Duplicated Sets	2	7

* Part IV requests are included in the total

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TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder Colorado 80301

SUBJECT: Monthly Report for October, 1971

I. Monthly Highlights

October 6

Presentation - An overview of the Northern Colorado Educational BOCS and Information Retrieval products and services was presented to Erie Elementary School staff in the St. Vrain District. (Simons)

October 6

Presentation - A presentation was made to the staff at Spangler Elementary in the St. Vrain District describing the products and services of the Information Retrieval Center and ERIC. (Simons)

October 7

Presentation - On October 7 a group of administrators and board members from the American Association of School Administrators and the NEA Rural Education Association visited the BOCS office. The 15 members visiting the BOCS Center represented Boards of Cooperative Services and Intermediate Districts from across the United States. A presentation describing ERIC products and services and the Information Retrieval Program was presented in detail. Each administrator was provided the opportunity to make a request for a sample print out from the Center.

October 8 & 9

Convention - A booth display portraying educational services supplied through Data Processing (sponsored by Univac) at the Regency Rodeway Inn in Denver was presented at the CASE Convention. This display featured ERIC and the Information Retrieval products and services available from the BOCS. (Simons)

October 8

Presentation - A follow-up presentation was made to the staff at Erie Elementary on ERIC products and services and the Information Retrieval Center. (Simons)

October 13

Presentation - Two elementary school faculties from the Longmont Public Schools received a presentation regarding the use of the Automated Information Retrieval services and ERIC products and services. Several requests were processed as a result of this meeting.

October 14

Presentation - A presentation was given to the Loveland Junior High School Faculty describing ERIC products and services and the use of the Information Retrieval Center of the BOCS.

October 20

Presentation - The Personnel Services Consultants from the Denver Public Schools visited the BOCS operations and received a presentation on ERIC products and services and the Information Retrieval Center. (Simons)

October 20

Presentation - ERIC products and services and the operations of the Information Retrieval Center were discussed at Hygiene Elementary in the St. Vrain District. (Simons)

October 21

Presentation - A presentation was made describing the uses of the ERIC system and the Information Retrieval Center to a Graduate Class in Media Methods at the University of Colorado. (Simons)

October 26

Presentation - Elementary principals from Boulder Valley Public Schools met at the University of Colorado to receive a presentation on ERIC products and services and the Information Retrieval Center. (Simons)

October 26-29

Dr. Turner and I visited the U.S. Office of Education for discussions with Dr. Tom Clemens, Mr. Harvey Marron, Mr. Charles Haughey and Mr. Charles Hoover to determine some future directions for the Information Retrieval Center of the BOCS. We also visited the National Center for Educational Communication including the Educational Reference Center and ERIC and the Division of Practice Improvement. These meetings provided the opportunity for an excellent exchange of ideas and provided some direction for the future of the Information Retrieval Program as it continues to serve a multi-state regional network.

October 28

Presentation - A presentation was made to the Casey Junior High

staff of the Boulder Valley Public Schools with a tour of the BOCS facilities following the presentation. ERIC products and the BOCS Information Retrieval service were described in detail. (Simons)

Enclosed is a copy of the new capabilities of the Univac 9400 which is installed and will be in operation November 1.

The BOCS Information Retrieval Center has added the Abstracts of Instructional Materials in Vocational and Technical Education (AIM) and Abstracts of Research and Related Materials in Vocational and Technical Education (ARM) materials to the data base providing resumes of 4,000 documents which are not included on ERIC tapes. This will definitely strengthen the data base in the area of vocational technology.

	Current Month	Since July, 1970
II. Microfiche' Distribution:		
A. Microfiche' checkout out from the Center on a two week basis	0	1233
B. Microfiche' duplicated (on a very limited basis)	209	746
III. Requests for Automated Information Retrieval based on the ERIC Data Base:		
A. Educational practitioners (includes teachers and librarians K-12)	446	2708
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	536	3607
C. Research and Development Specialists	39	182
D. Information Specialists and Dissemination Specialists	198	809
E. State Department Officials	55	773
F. Others (includes college and graduate students, college professors, USOE officials)	33	605
TOTAL FOR	1307	8684

IV. *Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID		
Wyoming	4	7	6	8	25	441
Utah	93	15	22	40	170	1563
Oregon	122	19	35	54	230	1040
Washington	39	17	17	45	118	883
South Dak.	4	61	18	46	129	626
Colorado	147	95	134	163	539	3802
Nevada	0	0	0	0	0	39
Idaho	16	7	0	0	23	48
Montana	0	0	1	3	4	17
Kansas	0	0	0	0	0	0
Other	6	6	35	22	69	225
TOTAL FOR	431	227	268	381	1307	8684

V. Total Manual Searches	99	1187

	Current Month	Running Total Since Feb., 1971
VI. Requests for PET, CAP, CAT, and SID		
Not reflected in total.		
A. Packets of Educational Topics (PET)	431	2045
B. Current Awareness Profiles (CAP)	227	1042
C. Catalog of Computerized Searches (CAT)	268	1762
D. Individualized Searches (Search In-Depth) (SID)	381	3835
TOTAL FOR	1307	8684

VII. PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)

(Since 3/1/71 Only)

**A. Briefs	0	1077
**B. Kits	9	53
**C. Microfiche Duplicated Sets	0	7

* Part IV requests are included in the total

** (PREP) is disseminated within the 7 school districts of the BOCS ONLY.)

THE UNIVAC 9400 SYSTEM MEANS MAJOR IMPROVEMENTS TO THE INFORMATION RETRIEVAL COMPONENT OF THE B O C S

SUCH AS:

ACCESS----

-A CATHODE RAY SCOPE, THE UNISCOPE 100, IS IN THE INFORMATION RETRIEVAL SPECIALISTS' OFFICE.

-INFORMATION RETRIEVAL IS RUN CONTINUALLY, ALL DAY, EVERYDAY (SIMULTANEOUS PROCESSING).

-REQUESTS ARE PROCESSED AS RECEIVED. TURNAROUND IS IMMEDIATE.

-ALL RETRIEVAL ITEMS (IDENTIFIERS, DESCRIPTORS, PUBLISHERS, AUTHORS) ARE AVAILABLE FOR IMMEDIATE DISPLAY IN ANY COMBINATION.

-INFORMATION RETRIEVAL STAFF CAN NOW SEARCH ON IDENTIFIERS, DESCRIPTORS, PUBLISHERS, AND AUTHORS.

SPEED----

-INPUT-OUTPUT PROCESSING FOR BATCH MODE (WHEN REQUIRED) IS TWICE AS FAST AS FORMER MACHINE.

-PROFILES ARE PRINTED AT THE RATE OF 1100 LINES PER MINUTE.

-PUNCH CARD INPUT IS PROCESSED AT 600 CARDS PER MINUTE.

-CORE CAPACITY OF MAIN MEMORY IS THREE TIMES LARGER (24K vs 98K).

-THE 9400 SYSTEM IS CAPABLE OF RESPONDING TO INQUIRIES BY THE INFORMATION SPECIALIST AT "THINKING SPEED" IN THE ON-LINE MODE.

FLEXIBILITY----

-RETRIEVAL LOGICS CAN INCLUDE DESCRIPTORS, IDENTIFIERS, PUBLISHERS, AND AUTHORS.

-THE INFORMATION SPECIALIST CAN PARTITION THE ABSTRACT FILE FOR RETRIEVAL IN ANY WAY DESIRED (FROM ANY ED NUMBER THROUGH ANY ED NUMBER).

FLEXIBILITY (Continued)----

-A SEPARATE TITLE FILE CAN BE DISPLAYED OR PRINTED FOR EVALUATION PURPOSES (TITLES OF ALL ERIC ABSTRACTS ARE "ON-LINE").

-LOGIC FUNCTIONS INCLUDE "AND", "OR", "NOT" CAPABILITY AND ARE AVAILABLE IN ANY COMBINATION UP TO FIVE LEVELS.

-IRRELEVANT ABSTRACTS CAN BE DELETED BEFORE PRINTING OF THE PROFILE.

-FILES AND INDEXES CAN BE EDITED FROM THE UNISCOPE 100.

-THE DATA BASE INCLUDES THE ENTIRE ERIC, RIE, CIJE, PLUS AIM-ARM MATERIALS WITH ROOM FOR P A C E PROJECTS, HUMAN RESOURCE AND OTHER FILES AS THEY BECOME AVAILABLE.

QUALITY----

-A PROFILE IS FINISHED AND READY TO MAIL AS SOON AS IT IS PRINTED; ALL EVALUATION HAS BEEN DONE EARLIER.

-ALL PRODUCTION IS STREAMLINED WITH MORE OPPORTUNITY FOR QUALITY CONTROL.

-THE USER SEES A NEW FORMAT WITH MORE INFORMATION ON THE PRINTED ABSTRACTS.

-NEW EVALUATION FORM WILL PROVIDE MORE FEEDBACK INFORMATION

THE END PRODUCT IS A HIGH-RELEVANCE PROFILE PRODUCED FASTER THAN EVER BEFORE!

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: Mr. William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 30th Street - Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for November, 1971

I. Monthly Highlights

November 5

Presentation - Mr. Dean Coon, Assistant Commissioner and several Department Heads from the Colorado Department of Education were presented with a discussion on the services of the Northern Colorado Educational Board of Cooperative Services. Specific emphasis was placed on a presentation and discussion of ERIC, Information Retrieval and the products available from the Information Retrieval Center.

November 8

Presentation - A presentation of ERIC products and services and the Information Retrieval Center was made to the faculty of Centennial Junior High in the Boulder Valley Public School District. (Simons)

November 8-12

Conference - During the week of November 8-12 the annual ASIS

Conference was held in Denver, Colorado. During this week two presentations and three tours (one official) were conducted. The major emphasis of the presentation and tours focused on the BOCS Information Retrieval Center and the methods and techniques for automated Information Retrieval as utilized by this Center.

November 11

Visitation - In conjunction with the ASIS Conference, Dr. Ted Brandhorst and Mr. Douglas Price, LEASCO Systems and Research Corporation, spent half a day touring the Information Retrieval Center and discussing mutual problems, areas of interest and concern related to the use of the ERIC tapes. The staff of the Information Retrieval Center enjoyed the opportunity to interact with these gentlemen.

November 12

Visitation - In conjunction with the ASIS Conference, Mr. Josh Smith, Associate Director of the ERIC/CLIS Clearinghouse and Miss Robyn Baugham, Assistant Project Director, Library and Information Center Reference Project, spent half a day visiting the Information Retrieval Center. One of the most frank and interesting discussions describing the "Service-Output and User Side of ERIC" and the "In-house Systems Side of ERIC" resulted from this visit.

(I very much appreciated Mr. Smith's interaction with the Information Retrieval staff and I highly recommend this type of discussion and interaction for all In-

formation Retrieval Centers. Perhaps a conference of Clearinghouse Directors and Information Retrieval "Output" Center Directors could be arranged. I feel my staff and I gained an immeasurable understanding of the ERIC "Input" problems and I am sure Mr. Smith gained a clearer understanding of the ERIC "Output" side of the total system.)

November 15

Visitation - Mr. Richard Brickley, Director of Project RISE, spent a day visiting the Information Retrieval Center. Mr. Brickley seemed most interested in understanding the automated and manual search systems of the Information Retrieval Center. Mr. Brickley also attended a daily meeting session which provided the opportunity for a discussion of methods and techniques for processing educational research and resource information.

November 16

Presentation - The entire Media and Library Staff of the Boulder Valley Public Schools were presented with a review of ERIC products and services and a thorough explanation of how to involve the teachers of the district in the utilization of the Information Retrieval services.

November 19

Visitation - Miss Joan Bartell and Mrs. Sandy Boland, Rocky Mountain Special Education Center, University of Northern Colorado, Greeley, visited the Information Retrieval Center to

discuss the possibility of placing a CRT (scope) terminal at the Rocky Mountain Special Education Center. No decision was reached during this meeting.

November 21-23

Conference - A total BOCS display with emphasis on ERIC products and services and the Information Retrieval Center was displayed at the Colorado Association of School Executives Convention in Colorado Springs. (Simons)

	Month	July, 1970
III. Microfiche' Distribution:		
Microfiche' duplicated	262	2241
II. Requests for Automated Information Retrieval based on the ERIC Data Base:		
A. Educational practitioners (includes teachers and librarians K-12)	350	3058
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	556	4163
C. Research and Development Specialists	23	205
D. Information Specialists and Dissemination Specialists	102	911
E. State Deparment Officials	39	812
F. Others (includes college and graduate students, college professors, USOE officials)	46	651
TOTAL FOR	1116	9800

IV. Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID		
*Colorado	64	39	70	142	315	4117
**Idaho	41	18	22	7	88	136
**Kansas	0	0	0	0	0	0
**Montana	0	0	0	0	0	17
***NERCOE	1	0	0	13	14	14
*Oregon	93	12	32	37	174	1214
**No. Dakota	0	0	0	0	0	0
**So. Dakota	0	95	7	24	126	752
**Texas	6	0	49	2	57	57
*Utah	100	40	48	21	209	1772
*Washington	35	8	6	38	87	970
*Wyoming	3	0	6	9	18	459
Other	3	0	18	7	28	292
TOTAL	346	212	259	300	1116	9800

95

* - WAVE I - Since July of 1970
** - WAVE II - Since July of 1971
*** - NERCOE - New England Resource Center for Occupational Education, Boston,

V. Total Manual Searches	86	1273

	Current Month	Running Total Since Feb., 1971
VI. Requests for PET, CAP, CAT, and SID		
Not reflected in total.		
A. Packets of Educational Topics (PET)	346	2391
B. Current Awareness Profiles (CAP)	212	1254
C. Catalog of Computerized Searches (CAT)	258	2020
D. Individualized Searches (Search In-Depth) (SID)	300	4135
TOTAL FOR	1116	9800

VII. PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)

(Since 3/1/71 Only)

A. Briefs	23	1100
B. Kits	1	54
C. Microfiche Duplicated Sets	3	10

NOTE: PREP is disseminated within the 7 school districts of the BOCS ONLY.

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: Mr. William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for December, 1971

I. Monthly Highlights

December 1, 1971

Presentation - A presentation was given to a community group of interested citizens in Broomfield, Colorado. There were approximately ten people in the group. The objectives of the Information Retrieval Center, ERIC and the usage of the services were explained in detail. (Simons)

December 8, 1971

Meeting - An all-day meeting was held for the entire Information Retrieval staff to update the three products offered by the Center. The Guide to Information Retrieval Services will be updated in the immediate future.

December 10, 1971

Meeting - The Information Retrieval Specialists met to discuss a new product which will be available (after field tests in local districts) in the near future. This research and resource product will be of direct value to the classroom teacher.

December 15, 1971

Presentation - A presentation and tour of the BOCS facilities was given to the assistants to the Media Director in the Boulder Valley Public School District. ERIC products and services were discussed in detail. (Simons)

December 17, 1971

Presentation - A discussion of the Information Retrieval Services, ERIC as well as a new video tape (now available from the BOCS which describes the operation of the Information Retrieval Center) was shown to the seven BOCS Media Directors.

December 23, 1971

Presentation - A presentation of ERIC products and services and the Information Retrieval Center was made to the St. Vrain School District Board Members during a regularly scheduled meeting. Several Board Members requested searches as a result of this meeting. (Simons)

	Current Month	Running Total Since July, 1970
II. Microfiche' Distribution:		
Microfiche' duplicated	77	2,381
III. Requests for Automated Information Retrieval based on the ERIC Data Base:		
A. Educational practitioners (includes teachers and librarians K-12)	221	3,279
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	508	4,671
C. Research and Development Specialists	6	211
D. Information Specialists and Dissemination Specialists	76	987
E. State Department Officials	19	831
F. Others (includes college and graduate students, college professors, USOE officials)	48	699
TOTAL FOR	878	10,678

IV. *Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID		
Colorado	15	2	28	109	154	4,271
Idaho	18	9	13	12	52	188
Kansas	0	0	0	0	0	0
Montana	0	0	0	0	0	17
NERCOE	0	0	1	24	25	39
Oregon	97	4	21	49	171	1,385
So. Dakota	3	30	4	14	51	803
Texas	2	1	2	4	9	66
Utah	69	15	76	52	212	1,984
Washington	70	7	29	68	174	1,144
Wyoming	0	3	2	8	13	472
Other	11	2	3	1	17	309
TOTAL FOR	285	73	179	341	878	10,678

09

		Current Month	Running Total Since Feb., 1971
V.	Total Manual Searches	93	1,366
VI.	Requests for PET, CAP, CAT, and SID		
	Not reflected in total.		
	A. Packets of Educational Topics (PET)	285	2,676
	B. Current Awareness Profiles (CAP)	73	1,327
	C. Catalog of Computerized Searches (CAT)	179	2,199
	D. Individualized Searches (Search In-Depth) (SID)	341	4,476
	TOTAL FOR	878	10,678
VII.	PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)		
	(Since 3/1/71 Only)		
	**A. Briefs	0	1,100
	**B. Kits	0	54
	**C. Microfiche Duplicated Sets	77	87

* Part IV requests are included in the total

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TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: Mr. William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for January, 1972

I. Monthly Highlights

January 13, 1972

Presentation - A presentation of the overall functions of the BOCS including Information Retrieval was presented to the Southern Hill Junior High faculty. ERIC brochures were disseminated at this meeting. (Simons)

January 17, 1972

Visitation - Mrs. June Katucki, Project Rise, Conshohocken, Pennsylvania, visited the Information Retrieval Center for the purpose of exploring the procedures for processing information. The use this Center is making of ERIC products and services were discussed in detail.

January 17, 18, 19, 1972

Visitation - Dr. Richard Herlig, Kansas Department of Education, visited the Information Retrieval Center for a three day in-service training session. Emphasis of this in-service training session centered on a greater understanding of the Information Retrieval Center and the use of the ERIC data base. Dr. Herlig was also

interested in determining how Kansas could become more involved in the use of the products available from the Center.

January 18, 1972

Presentation - A transparency presentation was presented to a graduate class in Vocational Education at the University of Northern Colorado. ERIC brochures were distributed along with information on how to utilize the Information Retrieval services. (Simons)

January 24, 25, 26, 1972

Visitation - Mrs. Paula Corman, New England Resource Center for Occupational Education, Newton, Massachusetts, visited our Center for three days to observe the functions of the Information Retrieval staff. A presentation describing ERIC products and services was presented during this three day in-service session.

January 30, 1972

Conversation - Mr. Les Wells, Director, Secondary Education, Anchorage Public Schools, Anchorage, Alaska, contacted the Information Retrieval Center regarding the possibility of Alaska becoming a participant in services available from the Information Retrieval Center. As a result of this contact a letter was mailed to the Superintendent of Public Instruction in Alaska in early February with results pending.

January 30, 1972

Presentation - A graduate class on Educational Communication was given a presentation on the products and services of the Information Retrieval Center and ERIC. Both ERIC and Information Retrieval brochures were distributed to these graduate students.

	Current Month	Total Since Jan., 1972
II. Microfiche' Distribution:		
Microfiche' duplicated	58	58
III. Requests for Automated Information Retrieval based on the ERIC Data Base:		
A. Educational practitioners (includes teachers and librarians K-12)	241	241
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	489	489
C. Research and Development Specialists	12	12
D. Information Specialists and Dissemination Specialists	151	151
E. State Department Officials	25	25
F. Others (includes college and graduate students, college professors, USOE officials)	41	41
TOTAL FOR	959	959

IV. Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID		
*Colorado	106	22	86	208	422	422
**Idaho	53	11	13	15	92	92
**Kansas	3	0	0	6	9	9
**Montana	0	0	0	0	1	1
***NERCOE	0	4	4	41	49	49
*Oregon	57	2	8	24	91	91
**No. Dakota	0	0	0	0	0	0
**So. Dakota	1	18	2	15	36	36
**Texas	0	3	9	0	12	12
*Utah	10	28	14	35	87	87
*Washington	46	48	14	39	147	147
*Wyoming	3	0	4	6	13	13
Other	0	0	0	0	0	0
TOTAL	279	136	154	390	959	959

* - WAVE I - Since July of 1970
** - WAVE II - Since July of 1971
*** - NERCOE - New England Resource Center for Occupational Education

V. Accumulative Totals

A. The total searches completed during the year 1970 (From August to December only'		1,533
B. The total searches completed druing the year 1971		9,145
VI. Total Manual Searches	62	62

VII. PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)

(Since 3/1/71 Only)

A. Briefs	0	0
B. Kits	1	1
C. Microfiche Duplicated Sets	1	1

NOTE: PREP is disseminated within the seven school districts of the BOCS ONLY.

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: Mr. William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for February, 1972

I. Monthly Highlights

February 10

Presentation - A presentation of the overall functions of the BOCS including Information Retrieval was presented to the Martin Park Elementary faculty, Boulder Valley Public Schools. ERIC brochures were disseminated at this meeting. (Simons)

February 11

Presentation - A transparency presentation was made to the public and school librarians involved with the seven BOCS districts and cities through the Multi-Media Advisory Committee. (Simons)

February 14-16

Visitation - Mrs. Jayann Angell, a newly hired field agent from the Kansas Department of Education visited this Center. The purpose of her visit was to gain insite in the use of the Information Retrieval Services because Kansas is now utilizing the services of the Information Retrieval Center. The methods, techniques and procedures for processing automated Information Retrieval services were discussed in

depth with Mrs. Angell.

February 16

Presentation - The Information Retrieval Program and ERIC were discussed along with the overall functions of the BOCS to the School Board of the St. Vrain Valley Public Schools, Longmont, Colorado. (Simons)

February 17

Visitation - Dr. James Baker, Assistant Commissioner, Massachusetts Department of Education, Boston, Massachusetts and Mr. John A. Evans, The Mitre Corporation, Bedford, Massachusetts, visited the Information Retrieval Center for the purpose of understanding the operations, procedures and products available from the Information Retrieval Center to requesters. A presentation describing ERIC products and services was emphasized followed by a discussion focusing on how Massachusetts might become involved in utilizing services from this Center. No decisions were made at that time.

February 21-23

Visitation - Dr. Ron Mangano from NERCOE, Newton, Massachusetts, visited the Center for three days to observe the functions of the Information Retrieval Staff and for exploring the procedures of processing information retrieval profiles. Dr. Mangano also discussed the possibility of this Center placing a terminal in the NERCOE Center.

February 23

Presentation - Mr. Leonard A. Hergenreter was presented a proposal initiating a plan for the Community and Junior College network within

the State of Colorado to be able to utilize the Information Retrieval services available from this Center. Action on this proposal will be forthcoming from the State Board For Community Colleges in the immediate future.

February 24

Meeting - The BOCS Information Retrieval Staff met in order to discuss procedures and policies for the utilization of the new Current Index to Journals in Education (CIJE) data base now available to requesters from this Center. Also procedures for searching the AIM and ARM data base were discussed at that time. Both of these data bases are now available to educators as supplements and support to the RIE data base.

February 28

Visitation - Mrs. Louise Parker, Librarian, Gorman Junior High School, Colorado Springs, Colorado, visited the BOCS and was given a presentation on the functions of the BOCS with emphasis on the Information Retrieval Services and use of ERIC with classroom teachers. (Simons)

	Current Month	Running Total Since Jan., 1972	Running Total Since July, 1970
II. Microfiche' Distribution:			
Microfiche' duplicated	204	262	2,643
III. Requests for Automated Information Retrieval based on the ERIC Data Base:			
A. Educational practitioners (includes teachers and librarians K-12)	289	530	3,809
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	489	978	5,649
C. Research and Development Specialists	14	26	238
D. Information Specialists and Dissemination Specialists	185	336	1,323
E. State Department Officials	54	79	910
F. Others (includes college and graduate students, college professors, USOE officials)	69	110	809
TOTAL FOR	1,100	2,059	12,738

IV. Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID			
*Colorado	60	11	42	207	320	742	5,013
**Idaho	92	34	3	11	140	232	420
**Kansas	10	1	25	14	50	59	59
**Montana	0	0	0	0	0	1	18
***NERCOE	2	2	15	26	45	94	133
*Oregon	39	3	6	39	87	178	1,563
**No. Dakota	0	0	0	1	1	1	1
**So. Dakota	0	29	4	15	48	84	887
**Texas	1	2	7	0	10	22	88
*Utah	162	29	64	60	315	403	2,387
*Washington	6	2	0	35	43	190	1,334
*Wyoming	8	1	8	10	24	40	512
Other	5	0	5	4	14	14	323
TOTAL	385	114	179	422	1,100	2,059	12,738

* - WAVE I - Since July of 1970
** - WAVE II - Since July of 1971
*** - NERCOE - New England Resource Center for Occupational Education

V.	Accumulative Totals			
	A. The total searches completed during the year 1970		1,533	
	B. The total searches completed druing the year 1971		9,145	
VI.	Total Manual Searches	23	85	1,451
VII.	PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)			
	(Since 3/1/71 Only)			
	A. Briefs	0	0	1,100
	B. Kits	0	1	55
	C. Microfiche Duplicated Sets	0	1	88

NOTE: PREP is disseminated within the seven school districts of the BOCS ONLY.

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W. Washington, D.C. 20201

FROM: Mr. William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for March, 1972

I. Monthly Highlights

March 1

Meeting - Met with the new Colorado Commissioner of Education, Dr. Donald D. Woodington, to provide an introduction and overview of the retrieval services and discuss the future of automated Information Retrieval in Colorado.

March 9

Presentation - A presentation was made to the grade level chairman at North Mor Elementary School, Adams County School District #12. The BOCS services were discussed informally with teachers in the lounge. ERIC brochures along with Information Retrieval pamphlets were distributed. (Simons)

March 15 and 16

Visitation - The Title III Evaluation Team spent two days exploring the entire BOCS operation including the specific component areas. The purpose of the evaluation was to determine if the NCEBOCS is meeting the program objectives as described in the ESEA Title III Proposal. This report will be available by the first of May, 1972.

March 20

Meeting - The Information Retrieval Staff met to discuss new products and services to be offered from this Center beginning summer of 1972. Complete descriptions and brochures will be available describing these new products in the immediate future.

March 20

Meeting - Met with Dr. Leon Minear, Regional Commissioner, U.S. Department of Health, Education and Welfare, Denver, Colorado, to provide a review of the Information Retrieval services and to solicit his support in providing resource and research materials on a regional basis. Dr. Minear is very willing to provide assistance to the Information Retrieval Program of the NCEBOCS. (See enclosed copy of report presented to Dr. Minear.)

March 21

Meeting - Met with two representatives from NEA (National Education Association) to describe Information Retrieval products and services and to explore possibilities of some departments within NEA utilizing the retrieval services.

March 22

Presentation - The services areas of the NCEBOCS, including Information Retrieval and ERIC, were presented to the Librarians of the University of Northern Colorado in Greeley. (Simons)

March 28

Visitation - Dr. Delmer J. Trester visited the Information Retrieval Center in order to better understand the products and services available from the Center. Dr. Trester was also interested in exploring ways in which the ERIC/CHess and Information Retrieval Center could better work together in providing new products and services.

	Current Month	Running Total Since Jan., 1972	Running Total Since July, 1970
II. Microfiche' Distribution:			
Microfiche' duplicated	94	356	2,737
II. Requests for Automated Information Retrieval based on the ERIC Data Base:			
A. Educational practitioners (includes teachers and librarians K-12)	425	955	4,764
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	527	1,505	7,154
C. Research and Development Specialists	20	46	284
D. Information Specialists and Dissemination Specialists	125	461	1,784
E. State Department Officials	82	161	1,071
F. Others (includes college and graduate students, college professors, USOE officials)	62	172	981
TOTAL FOR March	1,241	3,300	16,038

V. Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID			
*Colorado	119	18	85	180	402	1,144	6,157
**Idaho	71	37	39	24	171	403	823
**Kansas	7	1	15	27	50	109	168
**Montana	0	0	0	0	0	0	18
***NERCOE	0	2	0	44	46	140	273
*Oregon	26	3	20	28	77	255	1,818
**No. Dakota	0	0	0	0	0	1	1
**So. Dakota	114	8	0	18	140	224	1,111
**Texas	17	0	6	1	24	46	134
*Utah	82	11	25	54	172	575	2,959
*Washington	18	2	0	88	108	298	1,632
*Wyoming	9	2	4	12	27	67	579
Other	4	2	11	7	24	38	361
TOTAL	467	86	205	483	1,241	3,300	16,038

* - WAVE I - Since July of 1970
** - WAVE II - Since July of 1971
*** - NERCOE - New England Resource Center for Occupational Education

V. Accumulative Totals

A. The total searches completed during the year 1970		1,533	
B. The total searches completed druing the year 1971		9,145	
VI. Total Manual Searches	49	134	1,500

VII. PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)

(Since 3/1/71 Only)

A. Briefs	0	0	1,100
B. Kits	0	1	55
C. Microfiche Duplicated Sets	94	95	182

NOTE: PREP is disseminated within the seven school districts of the BOCS ONLY.

NORTHERN COLORADO EDUCATIONAL
BOARD OF COOPERATIVE SERVICES

1750 30th St., Suite 48 • Boulder, Colorado 80301 • Phone 444-4687

March 20, 1972

Dr. Leon P. Minear
Regional Commissioner
U.S. Dept. of Health, Education,
and Welfare
Room 9017, Federal Office Bldg.
19th and Stout Streets
Denver, Colorado 80202

Dear Commissioner Minear:

The following statistics have been collected from 1967 to the present and show an interesting growth rate for the automated Information Retrieval Center of the Northern Colorado Educational Board of Cooperative Services:

I. Total Number of Searches:

1967 - Pilot Grant Title IV	30	Test profiles in 4 basic curriculum areas
1968 - Planning Grant Title III	456	Profiles of Information (automated & manual)
1969 - Operational Grant	603	Profiles of Information (automated & manual)
1970 - Continuation Grant (6 state ESEA Title IV)	489	Manual searches
	2,678	Automated searches
	3,167	Profiles of Information for 1970.
1971 - Continuation Grant (10 state ESEA Title IV)	934	Manual searches
	9,145	Automated searches
	10,079	Profiles of Information for 1971.
1972 - Continuation Grant (10 state ESEA Title IV) January, 1972 only	62	Manual searches
	959	Automated searches
	1,021	Profiles on Information for 1972.

Total searches processed since 1967

13,871	Automated searches
1,485	Manual searches
15,356	Total searches

Total searches processed in Colorado

1967	30	Test profiles
1968	456	Profiles
1969	603	Profiles
1970	2,200	Profiles (including manual)
1971	4,431	Profiles (including manual)
January 1972	422	
	8,142	Total processed for Colorado

A profile of information includes the computer (automated print-outs of searched materials and the manual researched materials are compiled by the Reference Librarians. The entire packet of material is combined to make a profile of information matching the original request.

II. Types of Users:

USOE Officials

State Legislators

State Department Officials
Commissioners
Legislative Study Committees
All departments and curriculum area Advisors or Consultants

Regional Education Laboratories

Mid-Continent Regional Educational Laboratory-Kansas City, Missouri
Northwest Regional Laboratory - Portland, Oregon
Far West Regional Laboratory - Berkeley, California
Rocky Mountain Educational Laboratory - Greeley, Colorado (now closed)

Arapahoe County Mental Health Center - Littleton, Colorado

Independent Schools

Vocational Education Schools
Special Education Schools

Colleges and Universities
Individuals or Schools of Education

Colorado State College	University of Wyoming
Colorado State Univ.	University of Massachusetts
University of Colorado	Florida State University
University of Denver	University of Texas

Deans
Professors
University Research Bureaus
University Librarians
Graduate Students

School Districts

Superintendents	Private Citizens
Assistant Superintendents	(Advisory Committees)
Project Directors	Librarians
Teacher Aides	School Board Members
Supervisors	Teachers (k-12)
Consultants	

Other State Centers:

California
Humboldt College - Arcadia, California
North Coast PACE Center, Eureka, California

Michigan
The ASSIST Center - Wayne, Michigan

Mississippi
Project TRANSFER, ESEA Title III; Columbia Public Schools - Columbia, Mississippi

Nevada
Western Nevada Regional Educational Center, Lovelock, Nevada

New Mexico
ERIC Center for Small Schools & Rural Education, Las Cruces, New Mexico

North Dakota
Upper Red River Valley Education Services, Grand Forks, No. Dakota

South Dakota
Southeast Education Service Center, Sioux Falls, South Dakota

Utah
State Department of Education, Salt Lake City, Utah

Washington
State Department of Education, Olympia, Washington

Oregon
Oregon Board of Education, Salem, Oregon

Montana
Department of Education, Helena, Montana

Massachusetts
New England Resource Center for Occupational Education (NERCOE)
Newton, Massachusetts

Kansas
State Department of Education, Topeka, Kansas

Texas
Texas Information Service Project, Austin, Texas

Idaho
State Department of Education, Boise, Idaho

Wyoming
State Department of Education, Cheyenne, Wyoming

ADMINISTRATORS
Superintendents, Assistants, rincipals)

Assessment of Educational needs
Board of Education (working with)
Controversial Issues in Policy Making
Differentiated Staffing
Educational Finance
Program Budgeting
Use of Teacher Aides
Use of Advisory Committees (Lay Committees)
Bussing
Open Space Concept of Organization
Current Status of School Integration
Bond Issue Information
Accountability
PPBES
Negotiations
Long Range Planning
Systems Analysis

CONSULTANTS-SUPERVISORS

- Remediation Methods
- Ability Testing
- The Counselor's Role
- Health and Safety
- Information on Reading Consultants
- Teacher Evaluation
- Correctional Education
- Bibliotherapy
- Psychological Services Existing Types
- Special Education Programs
- Summer Programs
- Behavioral Objectives
- Vocational and technical Education

TEACHERS

- New concepts in Curriculum & Course Development
- Classroom Management Techniques
- Human Relations Unit
- Programmed Instruction
- Self Directed Groups
- Reading-Elementary Instruction
- Science Instruction
- Teaching of Values
- Biology Units
- Air Pollution
- English-Instruction-New Programs
- Free Choice Units for Secondary School Students
- Peer Teaching
- Team Teaching
- Non-Graded Schools
- Un-Graded Schools
- Support Information for all Curriculum Areas
- Open Space Schools

GRADUATE STUDENTS

- Research in Computer Assisted Counseling
- Hyperactive Children Research
- Current Programs in Geriatrics
- Research in Pychomotors Development
- Undergraduate Curriculum Programs
- Sensitivity Training & Teacher Groups
- Student Activism
- Television Effects on Children
- All type of dissertation Topics

March 20, 1972

If I can be of further assistance in supplying additional information or statistics, I will be happy to do so upon request.

Sincerely,

William H. McCleary, Director
Information Retrieval

WHM:dr

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center For Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: Mr. William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for April, 1972.

I. Monthly Highlights

April 6

Meeting - Met with Mr. Perc Schmelzer, Assistant Superintendent for Instruction, Poudre District #R-1, Fort Collins, Colorado, to describe a new concept developing with the seven districts of the BOCS. Permission was received for Information Specialists to contact teachers in the buildings, taking requests and returning the processed information to the teacher to help the teachers implement the information in the classroom.

April 12

Meeting - Met with members of the Colorado Department of Education to discuss state cooperation in development field agents and resource agents to disseminate and defuse information processed by the NCEBOCS Information Center.

April 13

Meeting - Met with officials of the Wyoming Department of Education to present new products and services and a contract for 1972-73.

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center For Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

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April 13

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April 19

Visitation - An overview of NCEBOCS products, programs and services was presented to the faculty at Bear Creek Elementary, Boulder, Valley Public Schools. (Simons)

April 24

Meeting - Met with Dr. Ferucio Freschet, NERCOE, Boston, Massachusetts, to discuss new products and services including a package (PET) product and a Catalog (CAT) of searches focusing on vocational and technical education. These products would be centered on the new CIJE and AIM & ARM data bases now available from the BOCS Information Retrieval Center.

April 27

Visitation - Information Retrieval and NCEBOCS programs were discussed with Mrs. Sparkman, Adams 50 Language Art Consultant. (Simons)

INFORMATION RETRIEVAL

	Current Month	Running Total Since Jan., 1972	Running Total Since July, 1970
II Microfiche' Distribution:			
Microfiche' duplicated	227	583	2,964
III. Requests for Automated Information Retrieval based on the ERIC Data Base:			
A. Educational practitioners (includes teachers and librarians K-12)	382	1,334	6,101
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	491	1,996	9,150
C. Research and Development Specialists	45	91	345
D. Information Specialists and Dissemination Specialists	99	560	2,344
E. State Department Officials	148	309	1,380
F. Others (includes college and graduate students, college professors, USOE officials)	70	242	1,223
TOTAL FOR APRIL	1,235	4,535	20,573

IV. Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID			
*Colorado	18	16	34	166	234	1,378	7,535
**Idaho	74	16	15	18	123	526	1,349
**Kansas	6	0	44	117	167	276	444
**Montana	0	0	0	0	0	0	18
***NERCOE	4	3	20	88	115	255	528
*Oregon	60	4	36	11	111	366	2,184
**No. Dakota	0	0	0	0	0	1	1
**So. Dakota	51	2	1	28	82	306	1,417
**Texas	0	0	0	0	0	46	134
*Utah	194	7	52	52	305	880	3,839
*Washington	2	0	19	47	68	366	1,998
*Wyoming	1	0	12	7	20	87	666
Other	2	2	1	5	10	48	409
TOTAL	412	50	234	539	1,235	4,535	20,573

* - WAVE I - Since July of 1970
** - WAVE II - Since July of 1971
*** - NERCOE - New England Resource Center for Occupational Education

	Current Month	Running Total Since Jan., 1972	Running Total Since July, 1970
V. Accumulative Totals			
A. The total searches completed during the year 1970		1,533	
B. The total searches completed druing the year 1971		9,145	
VI. Total Manual Searches	20	154	1,654
VII. PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)			
(Since 3/1/71 Only)			
A. Briefs	0	0	1,100
B. Kits	0	1	55
C. Microfiche Duplicated Sets	227	322	409

E: PREP is disseminated within the seven school districts of the BOCS ONLY.

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center For Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: Mr. William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 - 30th Street, Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for May, 1972

I. Monthly Highlights

May 2

Meeting - Met with Dr. Al Metcalf, Nancy Motomatsu, Dr. Bob Groeschell and several members of the State of Washington Department of Education, to discuss a contract to begin July 1, 1972 through June 30, 1973. This contract is for utilization of the automated Information Retrieval Center products and services by the State of Washington.

May 4 & 5

Meeting - Met with Commissioner Dr. Donald Barnhart, South Dakota Department of Education and Mr. Jim Simpson, Director of Information Retrieval Services, to discuss the contract for continued use of the terminal and products and services from the Information Retrieval Center during 1972-73.

May 8

Meeting - Met with Mr. Vern Bostrom, Assistant Superintendent-Instruction, Westminster Public Schools, to describe new concepts developed within the seven districts of the Board of Cooperative Services. Information Retrieval Specialist will be contacting teachers in buildings taking requests and returning processed information to teachers to implement in the classroom. This new field agent concept, in its second month

T-13 (BPL) Blueberries for Sal
Play With Me
Side 1
Harold and the Purple Crayon
Don't Count Your Chicks
Side 2

T-14 (BPL) Bonhomme
Side 1
Tico and the Golden Wings
Side 2

T-15 (LV) Brier Rabbit and Brier Bear (15 Min - P,I)
American Folk Tale -- dramatization.

T-16 (W) Br'er Rabbit and the Tar Baby (15 min - 1 reel, 3 3/4ips)
With: Gone Is Gone (Univ. of Texas)

T-17 (BPL) Caps for Sale
Little Toot
Side 1
The Biggest Bear
Andy and the Lion
Side 2

T-18 (LV) Christmas Stories (P)
The Long Stocking, Christmas Kitten, (Educ. Reading Service)
The Friendly Beasts, On Christmas Eve

T-19 (W) The Circus (30 min - 1 reel 3 3/4ips)
Part I and II (University of Texas)

T-20 (LV) Classics For Children (30 min. ea. - I)
Stories told to music.
Volume I - El Torito the Little Bull
The Seasons
The Trojan Horse
Peer Gynte Adventures of the Stormy Sea
Peer Gynts Adventures in the Hall of the Mountain King
Peer Gynts Adventures in Arabia

Volume II Diana and the Golden Apples
The Sleeping Beauty
Story of Suzette
Frederic and the Dancing Leaf
Swan Lake
Waltz of the Flowers
Chin Chow and the Golden Bird
Little Abou and the Camel
Invitation to the Dance
The Three Cornered Hat

T-21 (LV) The Coat With Magic Pockets (15 min - P,I)
Western Folk Tale

of operation, is receiving excellent results from educators within the BOCS.

May 10, 11, 12

Conference - Attended the NCEC Dissemination Conference in Columbia, South Carolina. This provided the opportunity for excellent interaction with similar types of information processing centers across the country. The conference also provided the opportunity to hear discussions describing the role of the field agent in the States of Utah, Oregon and South Carolina.

May 15

Visitation - Dr. Jack Newfield, an Education Fellow from the U.S. Office of Education, National Center for Educational Communication, visited the Information Retrieval Center for the purpose of gaining an understanding of the products and services offered from this Center. Dr. Newfield had the opportunity to meet with the Information Retrieval staff in order to observe the staff interaction for processing requests.

May 25

Meeting - Met with Dr. Bob Barnes, Director of Research Coordinating Unit, to discuss possible contract for processing information for the community colleges of Colorado. Details for this contract will be worked out in the near future.

	Current Month	Running Total Since Jan., 1972	Running Total Since July, 1970
II. Microfiche' Distribution:			
Microfiche' duplicated	173	756	3,137
II. Requests for Automated Information Retrieval based on the ERIC Data Base:			
A. Educational practitioners (includes teachers and librarians K-12)	530	1,864	6,631
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	509	2,505	9,659
C. Research and Development Specialists	100	191	445
D. Information Specialists and Dissemination Specialists	35	595	2,379
E. State Department Officials	12	160	1,392
F. Others (includes college and graduate students, college professors, USOE officials)	31	101	1,254
TOTAL FOR	1,217	5,752	21,730

V. Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID			
*Colorado	12	0	22	105	139	1,517	7,674
**Idaho	21	4	15	14	54	580	1,403
**Kansas	9	0	11	216	236	512	680
**Montana	0	0	0	0	0	0	18
***NERCOE	0	0	0	41	41	296	569
*Oregon	34	1	11	3	49	415	2,233
**No. Dakota	0	0	0	0	0	1	1
**So. Dakota	249	11	0	12	272	578	1,689
**Texas	0	3	30	0	33	79	167
*Utah	33	1	76	40	150	1,030	3,980
*Washington	30	15	21	71	137	503	2,135
*Wyoming	27	5	54	10	96	183	762
Other	8	0	2	0	10	58	419
TOTAL	423	40	242	512	1,217	5,752	21,730

* - WAVE I - Since July of 1970
** - WAVE II - Since July of 1971
*** - NERCOE - New England Resource Center for Occupational Education

	Current Month	Running Total Since Jan., 1972	Running Total Since July, 1970
V. Accumulative Totals			
A. The total searches completed during the year 1970		1,533	
B. The total searches completed during the year 1971		9,145	
VI. Total Manual Searches	39	193	1,693
VII. PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)			
(Since 3/1/71 Only)			
A. Briefs	0	0	1,100
B. Kits	256	251	312
C. Microfiche Duplicated Sets	111	433	631

Note: PREP is disseminated within the seven school districts of the BOCS ONLY.

TO: Dr. Lee Burchinal, Assistant Commissioner - National Center for Educational Communication, U.S. Office of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

Mr. Charles Hoover, Director - Division of Information Resources, U.S. Office of Education, 330 Independence Avenue, S.W., Washington, D.C. 20201

FROM: Mr. William H. McCleary, Director - Information Retrieval Center, NCEBOCS, 1750 30th Street - Suite 48, Boulder, Colorado 80301

SUBJECT: Monthly Report for June, 1972

I. Monthly Highlights

June 1 & 2

Display - The automated Information Retrieval Center of NCEBOCS was requested to display products and services at the Ed/Fair '72 program sponsored by the Bureau of Elementary and Secondary Education, USOE, Washington, D.C., May 31 and June 1 and 2, 1972. The purpose of this very successful program, "is a producer-consumer school exposition of validated exemplary educational practices funded through federal programs..."[1] Approximately 20 projects and programs were displayed during the three day conference.

June 8

Meeting - Met with Dr. Bob Barnes, Research Coordinating Unit of the State Board for Community and Junior College and Occupational Education, Denver, Colorado, about a display on the Conference for Vocational/Technical Teachers and Personnel throughout Colorado in August at Colorado State University. The Retrieval Center will display a CRT Scope for retrieval of information from the Boulder Center as well as other products and services available from

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[1] Lawrence Johnson & Associates, Inc. Description on Ed/Fair '72. May 15, 1972

the Center.

June 12

Presentation - A presentation describing the information retrieval services was given to a graduate level class in multi-media at the University of Colorado and sponsored by the BOCS.

June 14

Presentation - A presentation describing information retrieval products and services was given to a graduate class at the University of Northern Colorado, Greeley, Colorado. This class of vocational teachers and administrators were most interested in the information retrieval products and made many requests after the class.

June 28

Visitation - Mr. Al Moorehead, National Center for Educational Communication of OSOE, visited the IR Center. The staff exchanged ideas on information retrieval and compared our system to Data Dialog. The use of the Uniscope 100 was demonstrated by submitting several logics.

June 30

Visitation - Mr. Tony Bailey visited the Center. He particularly wanted to know how ERIC could be adapted to the educational system in England. The entire IR staff met with Mr. Bailey and answered his questions.

	Current Month	Running Total Since Jan., 1972	Running Total Since July, 1970
II. Microfiche' Distribution:			
Microfiche' duplicated	154	910	3,291
III. Requests for Automated Information Retrieval based on the ERIC Data Base:			
A. Educational practitioners (includes teachers and librarians K-12)	331	2,195	6,962
B. Educational Decision Makers (includes superintendents, assistant superintendents, project directors, principals, consultants)	272	2,777	9,031
C. Research and Development Specialists	97	288	542
D. Information Specialists and Dissemination Specialists	45	640	2,424
E. State Department Officials	25	349	1,417
F. Others (includes college and graduate students, college professors, USOE officials)	16	289	1,270
TOTAL FOR	786	6,538	22,546

IV. Requests from Regional Information Retrieval Networks:

	PET	CAP	CAT	SID			
*Colorado	73	2	29	98	202	1,719	7,876
**Idaho	10	3	10	9	32	612	1,455
**Kansas	4	0	0	91	95	607	775
**Montana	0	0	0	1	1	1	19
***NERCOE	0	0	0	55	55	351	624
*Oregon	7	0	0	0	7	422	2,240
**No. Dakota	0	0	0	0	0	1	1
**So. Dakota	1	0	0	18	19	597	1,708
**Texas	0	0	0	0	0	79	167
*Utah	0	2	42	30	74	1,104	4,056
*Washington	48	30	81	108	267	770	2,402
*Wyoming	0	0	0	22	22	205	784
Other	1	0	0	11	12	70	431
TOTAL	144	37	162	443	786	6,538	22,546

* - WAVE I - Since July of 1970
** - WAVE II - Since July of 1971
*** - NERCOE - Northeast Regional Exchange Center for Occupational Education

	Current Month	Running Total Since Jan., 1972	Running Total Since July, 1970
V. Accumulative Totals			
A. The total searches completed during the year 1970		1,533	
B. The total searches completed during the year 1971		9,145	
VI. Total Manual Searches	32	225	1,725
VII. PREP (Putting Research into Educational Practice - a USOE Dissemination of Research Program.)			
(Since 3/1/71 Only)			
A. Briefs	0	0	1,100
B. Kits	39	295	351
C. Microfiche Duplicated Sets	15	448	646

NOTE: PREP is disseminated within the seven school districts of the BOCS ONLY.

APPENDIX C

SUMMER WORKSHOP INFORMATION

WORKSHOP REPORT

INFORMATION RETRIEVAL WORKSHOP

July 26-30, 1971

Held At The
GOLDEN BUFF MOTEL
Boulder, Colorado

Conducted By
Mr. William H. McCleary

FOREWORD

One of the main tasks of the Northern Colorado Educational Board of Cooperative Services is to provide Information Retrieval service to both local and state agencies. The service is based in the ERIC system and augmented by the CIJE and RIE.

This workshop was fortunate in having Mr. Chuck Hoover of the United States Office of Education, Division of Information Resources present for two and a half days. Staff members as well as participants were pleased to have the opportunity to talk personally with Mr. Hoover about U.S. Office of Education and ERIC future plans.

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INTRODUCTION

During the week of July 26-30, 1971 a workshop was held for representatives of those states who had been associated with or had expressed interest in being associated with the Information Retrieval service of the Northern Colorado BOCS. A total of ten states were to send representatives.

Six of the states had previously been associated with the Information Retrieval service. Those states were Colorado, Oregon, South Dakota, Utah, Washington and Wyoming. These states were identified as "WAVE I" States. All sent a representative to the workshop except Wyoming. Colorado's representative attended only one day of the workshop. The remaining four states, identified as "WAVE II" States, were Idaho, Kansas, Montana and North Dakota. All of the WAVE II States sent representatives.

PURPOSE OF WORKSHOP

The purpose of the workshop was two-fold. It was hypothesized that representatives from WAVE I States would benefit greatly from a detailed explanation of the inner workings of the Retrieval Center including actual practice in constructing "logic" for information searches. On the other hand, it was assumed that this type of intensive training would be excessive for those representatives new to the Information Retrieval Center. Therefore, the scope of activities planned for the WAVE II representatives were more general in nature, tending toward an overview of the system's capabilities.

EVALUATION DESIGN

A comprehensive evaluation design was formulated which contained two components. One component was a Sematic differential

type instrument which was administered to all the representatives during the initial session on Monday morning, July 26th and again on Friday afternoon, July 30th. Thirteen additional questions were asked of the participants during the post-test session. These questions were designed to obtain data for future workshop modification.

EVALUATION RESULTS

Overall, the evaluation results indicated a positive attitude toward the workshop. Detailed results of the workshop evaluation were reported under the headings of (1) Objective Accomplishment, (2) Workshop Mechanics, (3) Participant Attitudes and (4) Participant Free Responses.

Objective Accomplishment

As can be noted from Table 1, the first four questions of the post-test instrument related to the achievement of the workshop objectives. Participant perceptions of the degree of objective achievement were quite high. The mean degree of accomplishment for those four questions ranged from 3.9 to 4.5 on a five point scale. (The scale was as follows: 1-very low, 2-low, 3-moderate, 4-high, and 5-very high.) As can also be noted on Table 1, the WAVE I representative consistently perceived their degree of objective accomplishment higher (.5 to .8) than did the WAVE II representatives.

Workshop Mechanics

The next six questions related to the mechanics of the workshop. As can be noted from Table 1, all of these questions had high mean ratings (3.7 to 4.9) with the exception of question No. 8 which re-

TABLE 1

PARTICIPANT RESPONSES TO QUESTIONS
ONE THROUGH TEN

	Very Low (1)	Low (2)	Moder-ate (3)	High (4)	Very High (5)	Total Mean	WAVE I Mean	WAVE II Mean	Diff. W.I - W. II
1. To increase skill and understanding in handling, using, and managing material provided through the Northern Colorado Educational BOCS Retrieval Center.	0	0	1	5	2	4.1	4.5	3.8	+ .7
2. To gain in knowledge of ERIC and retrieval services in general.	0	0	0	6	2	4.3	4.5	4.0	+ .5
3. To increase ability to use and evaluate ERIC and retrieval service materials.	0	0	2	.5	1	3.9	4.3	3.5	+ .8
4. To develop a greater appreciation of the role of the Northern Colorado Educational BOCS Retrieval Center in providing information services to your state.	0	0	0	4	4	4.5	4.8	4.3	+ .5
5. Physical facilities									
a. Meeting Rooms	0	0	0	6	0	4.1	4.3	4.0	+ .3
b. Housing	0	1	1	4	1	3.7	3.8	3.7	+ .1
6. Availability of staff to help and consultation.	0	0	0	1	7	4.9	4.8	5.0	- .2
7. Quality of help received from the staff.	0	0	0	2	6	4.8	4.8	4.8	.0
8. Free time.	1	2	1	2	1	3.0	3.0	3.0	.0
9. Institute program.	0	0	0	7	1	4.1	4.3	4.0	+ .3
10. Institute organization	0	0	1	6	1	4.0	4.0	4.0	.0

lated to "free time". Question No. 8 was rated 3.0 or "moderate". Differences between WAVE I and WAVE II States were not as consistent or strong in this set of questions as they were in questions No. 1-4.

Participant Attitudes

Participant responses to five key words using a semantic differential type scaling device was analyzed in a pre-post test structure. It was hypothesized that positive growth would be ascertained in both groups of participants. As can be observed from Table 2, no consistent results were obtained from the instrument with regard to the hypothesis.

Both WAVES indicated that their knowledge had either grown or remained constant with respect to all five key words. With the exception of responses of WAVE I representatives to the key phrase "Information Retrieval", all responses indicated a .5 or more growth.

The "desire to know more" category received mixed responses from the participants in WAVE I. WAVE II representatives were consistent in their responses. They tended away from a feeling of "wanting to know more".

Responses indicating the degree of "favorable" and "useful" perceptions toward the key words also exhibited no consistency. It should be noted, though, that both categories received ratings in the positive area.

Participant Free Response

Three open-ended questions were asked of the participants. The first question related to an identification of the strengths of the workshop, the second question solicited the participants' view of weaknesses of the workshop and the final question asked participants to make suggestions for workshop modification.

TABLE 2

PARTICIPANT RESPONSES TO FIVE ROOT WORDS

							WAVE I $\bar{X}$			WAVE II		
ERIC							Pre	Post	Diff.	Pre	Post	Diff.
Know much about it	5	4	3	2	1	Know little about it	4.0	4.5	+.5	2.5	3.25	+.75
Know as much as I want	5	4	3	2	1	Want to know more	2.5	3.25	+.75	1.5	2.25	+.75
Favorable	5	4	3	2	1	Unfavorable	5.0	4.5	-.5	4.25	3.75	-.50
Useful	5	4	3	2	1	Worthless	5.0	4.75	-.25	4.0	3.5	-.50
Descriptor Words												
Know much about it	5	4	3	2	1	Know little about it	3.25	3.75	+.50	1.75	2.25	+.50
Know as much as I want	5	4	3	2	1	Want to know more	1.75	1.75	.0	1.5	2.25	+.75
Favorable	5	4	3	2	1	Unfavorable	4.25	4.25	.0	3.75	3.50	-.25
Useful	5	4	3	2	1	Worthless	4.5	4.5	.0	3.75	3.50	-.25
Information Retrieval												
Know much about it	5	4	3	2	1	Know little about it	4.0	4.0	.0	2.0	2.5	+.5
Know as much as I want	5	4	3	2	1	Want to know more	2.5	2.25	-.25	1.0	2.0	+1.00
Favorable	5	4	3	2	1	Unfavorable	5.0	4.5	-.50	4.75	4.0	-.75
Useful	5	4	3	2	1	Worthless	5.0	4.75	-.25	4.75	4.0	-.75
Northern Colorado BOCS												
Know much about it	5	4	3	2	1	Know little about it	2.75	3.25	+.5	1.0	2.75	+1.75
Know as much as I want	5	4	3	2	1	Want to know more	2.25	2.75	+.5	1.0	2.0	+1.0
Favorable	5	4	3	2	1	Unfavorable	4.0	4.0	.0	4.0	4.25	+.25
Useful	5	4	3	2	1	Worthless	4.0	4.5	+.5	4.0	4.5	+.5
State Network for Retrieval And Dissemination												
Know much about it	5	4	3	2	1	Know little about it	3.25	3.75	+.5	1.75	2.25	+.5
Know as much as I want	5	4	3	2	1	Want to know more	2.25	1.75	-.5	1.0	2.0	+1.0
Favorable	5	4	3	2	1	Unfavorable	3.5	4.25	+.75	4.5	3.75	-.75
Useful	5	4	3	2	1	Worthless	3.75	4.5	+.75	4.25	4.0	-.25

The responses to the first of the three questions were the most numerous. The most often mentioned strength was the "hands-on" approach utilized. Participants felt this personalized approach was most beneficial.

The participant responses concerning weaknesses were fairly diverse. Two participants indicated that "lack of time" was a weakness although another participant indicated that the workshop was too long.

Participant suggestions indicated overall approval of the workshop. One individual suggested that a sharing of dissemination techniques that have worked in states would have been beneficial.

CONCLUSIONS

1. The workshop was viewed by the participants as a very worthwhile and beneficial experience.
2. The participants felt they did achieve the stated workshop goals.
3. Lack of "free time" was a concern of the participants.
4. The "semantic differential" type instrument was unable to adequately detect participant growth.
5. The personal attention given to the participants by the BOCS staff was viewed as exceptionally beneficial.

RECOMMENDATIONS

1. Revise evaluation instrument in order to ascertain participant growth.
2. When holding workshop for similar purpose, employ same general format.
3. Be sure to include personalized approach to BOCS staff - participant interaction.

APPENDIX "A"

"List of Participants"

LIST OF PARTICIPANTS

WAVE I

Kathy Wallentine	Utah
Jack Bech	Oregon
Jim Simpson	South Dakota
Nancy Motomatsu	Washington

WAVE II

Margaret Brown	Montana
Lowell Jensen	North Dakota
Arlin Morgan	Kansas
Ruth Seydel	Idaho

APPENDIX "B"

"Evaluation Instrument"

The main objectives of the institute are listed below. Using the five-point scale provided, indicate the degree of attainment of each objective at this point in the workshop.

	Very Low	Low	Moderate	High	Very High
1. To increase skill and understanding in handling, using, and managing material provided through the Northern Colorado Educational BOCS Retrieval Center.	1	2	3	4	5
2. To gain in knowledge of ERIC and retrieval services in general.	1	2	3	4	5
3. To increase ability to use and evaluate ERIC and retrieval service materials.	1	2	3	4	5
4. To develop a greater appreciation of the role of the Northern Colorado Educational BOCS Retrieval Center in providing information services to your state.	1	2	3	4	5

Indicate your degree of satisfaction with the following aspects of the institute.

5. Physical facilities					
a. Meeting Rooms	1	2	3	4	5
b. Housing	1	2	3	4	5
6. Availability of staff to help and consultation.	1	2	3	4	5
7. Quality of help received from the staff.	1	2	3	4	5
8. Free time.	1	2	3	4	5
9. Institute program.	1	2	3	4	5
10. Institute organization.	1	2	3	4	5

We want to find out how you feel about the activities of the workshops. Suppose we wanted to find out how you feel about the content of a lecture. The phrase "Lecture - Content" would appear at the top of the page followed by pairs of words with five numbers in between. For example, if there were a "bitter - sweet" continuum and you felt that the "Lecture - Content" was very much like "bitter" you would then mark the continuum as follows:

bitter 5 4 3 2 1 sweet

Be sure that you mark every continuum. Do not omit any, and be sure that there is only <u>one</u> mark on each continuum.

Work at fairly high speed. Do not worry or puzzle over the items. Give your first impressions, the immediate "feelings" about each one. On the other hand, please do not be careless because we want your true impressions.

ERIC

11.	Know much about it	5	4	3	2	1	Know little about it
12.	Know as much as I want	5	4	3	2	1	Want to know more
13.	Favorable	5	4	3	2	1	Unfavorable
14.	Useful	5	4	3	2	1	Worthless

DESCRIPTOR WORDS

15.	Know much about it	5	4	3	2	1	Know little about it
16.	Know as much as I want	5	4	3	2	1	Want to know more
17.	Favorable	5	4	3	2	1	Unfavorable
18.	Useful	5	4	3	2	1	Worthless

INFORMATION RETRIEVAL

19.	Know much about it	5	4	3	2	1	Know little about it
20.	Know as much as I want	5	4	3	2	1	Want to know more
21.	Favorable	5	4	3	2	1	Unfavorable
22.	Useful	5	4	3	2	1	Worthless

NORTHERN COLORADO BOCS

23.	Know much about it	5	4	3	2	1	Know little about it
24.	Know as much as I want	5	4	3	2	1	Want to know more
25.	Favorable	5	4	3	2	1	Unfavorable
26.	Useful	5	4	3	2	1	Worthless

STATE NETWORK FOR RETRIEVAL AND DISSEMINATION

27.	Know much about it	5	4	3	2	1	Know little about it
28.	Know as much as I want	5	4	3	2	1	Want to know more
29.	Favorable	5	4	3	2	1	Unfavorable
30.	Useful	5	4	3	2	1	Worthless

31. What in your opinion were two strengths of this one-week workshop?

a.

b.

32. What in your opinion were two weaknesses of this one-week workshop?

a.

b.

33. What suggestions do you have that would increase the benefits of the workshop to the participants?

APPENDIX "C"

"Participant Responses"

RESPONSES

Question: What, in your opinion, were two strengths of this one-week workshop?

A. The familiarization session for WAVE II states gave me information concerning pre-packaged products' and concerning BOCS procedures for reviewing requests evaluating products, and logic writing.

B. The session in which we dealt with actual requests was good.

A. "On-hand" experiences with the materials and functions of the subject content of the workshop.

B. Availability of BOCS staff on site to discuss and work with any and all aspects of the operation, and the flexibility of the schedule.

A. The personal contact and valuable aid of staff at BOCS. Good team of winners. Watching the "in-house" sessions on requests.

B. Presentation of states. Schedule of events was good - variety, involvement, pertinent, relevant.

A. Opportunity to work with the Information Spec. on face to face basis in discussion, logic writing. Now have a much better idea about their personalities, capabilities, etc.

B. Tally, work on how to state a problem for more effective retrieval.

A. The personal attention to the items I brought with me to check out. One week was excellent. I don't think another time I would need the descriptions of RIE, etc as I feel thoroughly comfortable with a good man, items now that I felt wobbally on.

B. The stress and familiarization resources such as retrieval tools and resources such as the clearinghouse and access to Chuck Hoover was excellent.

A. Organization of workshop and materials presented.

B. Personal attention and direction given to each workshop membersquestions and problems.

A. The warmth generated by BOCS staff.

B. Unstructured format.

A. There was time to discuss individual problems.

B. The daily staff meetings for processing requests were most enlightening.

RESPONSES

Question: What, in your opinion, were two weaknesses of this one-week workshop?

A. The workshop could perhaps have been shorter. It seemed that at the end we were almost searching for activities.

A. Personal lack of knowledge of workshop purpose prior to arrival (not <u>your</u> problem).

A. Not enough free time (I would have enjoyed some time to visit the University to go to the Atmospheric Research Lab, etc.)

B. Now that I've been to the Harvest House it would have been nice to have everything under one roof - not essential though. Facilities were satisfactory (just my druthers).

A. Needed more opportunity to exchange ideas with workshop people on social - let your hair down basis.

B. Visit to clearinghouse. They could have brought their material to us.

A. Not enough "cogitating" time to absorb and assimilate information and then to think out better directions for the State.

A. Since Montana was a WAVE II state and it was all completely new to me, I do not feel I can answer this question.

RESPONSES

Question: What suggestions do you have that would increase the benefits of the workshop to the participants?

In my present situation, I feel the workshop has been quite beneficial in providing me with information concerning ERIC, information retrieval, state information networks, and the functions of the BOCS program.

I cannot offer suggestions for improvement at this point.

Maybe next time we could include ways of dissemination that have really worked in the various states in addition to regular schedule.

You are on the right track. It was great. Might consider suggestions in No. 32 Everyone on BOCS staff was very helpful, cooperative, and well informed. Thanks for a fine week. You might accomplish the program in four days with a day in the middle for sight-seeing, visiting, individual projects.

I am very satisfied with having done exactly what I did. The only thing that would have helped would have been a sit down session forced on me to work with logic writing.

I did go through this time and time again, but I still feel I need much much more help on the specifics of descriptor selection.

I felt the talks (I doubt I would call them lectures) were so very well prepared, brief, clear, concise, and excellent.

The whole staff was great, felt comfortable and extremely happy about the whole thing. Thank you.

Really one of the best workshops and most profitable. Perhaps forewarning that we would (in WAVE II) be asked to formulate a policy of dissemination.

APPENDIX D

PRODUCT DESCRIPTIONS

ADDITIONAL N.C.E.B.O.C.S. PRODUCTS

INSTRUCTIONAL PRODUCTS AVAILABLE FROM
NCEBOCS PERSONALIZED INSTRUCTION CENTER

Personalized instruction offers teacher-prepared teaching alternatives for use with kids to supplement their learning opportunities.

IMM-EM - Ideas for Manipulative Materials: Elementary Math

IMM-EM offers an integrated approach to learning concepts, skills, and content materials. Designed for accessibility and flexibility, IMM-EM is presented as a multi-index package of idea cards.

COLAMDA Teacher Idea Cards and Student Activity Packets

COLAMDA grew from concerned teachers developing effective learning aids for unconcerned kids, specifically for low achievers in mathematics at the secondary level. The COLAMDA concept expanded to include workshops offering inservice training techniques for teachers as well as continued development of workable products for kids.

Supportive supplies for preparing concrete learning materials are also listed with unit prices below.

Product Description	Unit Price
IMM-EM Ideas for Manipulative Materials: Elementary Math	$14.50
[*COLAMDA Teacher Idea Cards *COLAMDA Student Activity Packets]	$27.10

*All COLAMDA materials are sold only to workshop participants and/or for reference purposes.

SUPPORTIVE SUPPLIES:

3/4" Hardwood Cubes (500/bag)	$7.85
#63 Blank Playing Cards, Buff (500/box)	$1.85
#63 Blank Playing Cards, White (500/box)	$1.85
#63 Blank Playing Cards, Yellow (500/box)	$1.85
#63 Blank Playing Cards, Blue (500/box)	$1.85
#63 Blank Playing Cards, Green (500/box)	$1.85
#63 Blank Playing Cards, Pink (500/box)	$1.85

A career-oriented mathematics program to supplement curriculum in the secondary level classroom and in related vocational/technical classrooms is being produced and will be field-tested during Fall, 1972.

For free order forms/additional information, contact:

NORTHERN COLORADO EDUCATIONAL
BOARD OF COOPERATIVE SERVICES
830 South Lincoln
Longmont, Colorado 80501

Attention: Personalized Instruction

ADDITIONAL NCEBOCS PRODUCTS

OCCASIONAL PAPERS AVAILABLE FROM NCEBOCS

Papers are prepared by staff members, using Information Retrieval Center services and data bases. Prices are indicated per title. Order information appears below listings.

ACCOUNTABILITY IN EDUCATION briefly reviews interpretations and directions of the "accountability role" surging in education.

Includes sample definitions of the concept, suggests tools, discusses national assessment, mentions "educational auditing", presents "performance contracting", offers reactions of educational professionals, directs attention toward student benefits.

Price per copy: $2.00

DIFFERENTIATED STAFFING "...a personnel design and system of organizations that seeks to make more effective and efficient use of human and nonhuman resources..."

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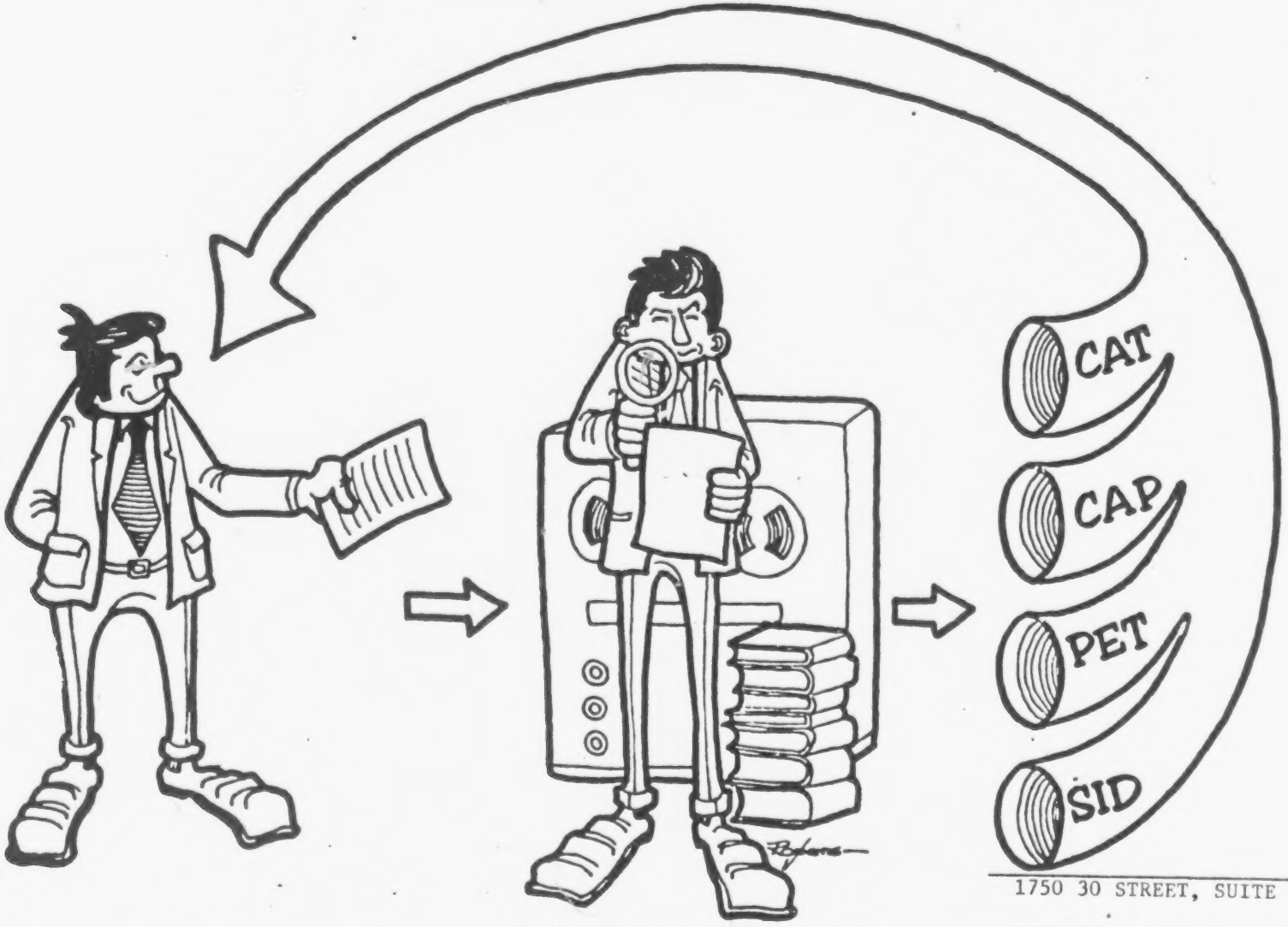

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- CURRENT INDEX TO JOURNALS IN EDUCATION (CIJE)...A new monthly guide to the periodical literature, with coverage of more than 500 major educational and education-related publications--includes a main entry section with annotations, and is indexed by subject and author. Semiannual and annual cumulative indexes are also available.

- ABSTRACTS OF INSTRUCTIONAL MATERIALS/RESEARCH AND RELATED MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION (AIM/ARM)...A quarterly abstract journal of vocational/technical educational materials, including instructional materials and research documents directed to teacher trainers or supervisors, educational specialists, and curriculum developers.

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The ERIC System

ERIC:

Education Resources Information Center, a nationwide system for collecting, abstracting, indexing, storing and disseminating papers, reports, etc., in the field of education.

CENTRAL ERIC:

The main coordinating office of ERIC, located in Washington, D.C., at the U.S. Office of Education.

CLEARINGHOUSE:

Any of 19 offices handling research information pertaining to a given facet of education.

LEASCO-ERIC TAPES:

The contractor responsible for merging the document resources at all clearinghouses and for preparing the monthly magnetic tapes from which Research In Education (RIE) and Current Index to Journals in Education (CIJE) are printed.

THESAURUS:

A collection of descriptors published by Central ERIC; to be used as an authority when storing and searching for documents; arranged alphabetically.

Educational Data Bases

RIE:

Research In Education, an abstracting journal of education documents, issued monthly.

CIJE:

Current Index to Journals in Education-A monthly publication which indexes and cites articles appearing in 500+ education-related journals.

AIM/ARM:

Abstracts of Instructional Materials and Research and Related Materials in Vocational and Technical Education-A quarterly abstract journal of vocational/technical educational materials including instructional and research-related documents.

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A user number, assigned solely to each individual SID request.

ORDER NUMBER:

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Research papers, studies, dissertations, curriculum studies, etc., that have been put into the ERIC system.

ABSTRACT:

The informative summary citing each document in RIE, and appearing on the first page of each document.

REPORT NUMBER:

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Terms used to index and retrieve documents (i.e., subject headings--program budgeting, behavioral objectives, teacher evaluation).

RESUME:

Contains not only the abstract, but also cataloging information about the document-author, title, institution, etc. and the descriptors used for indexing the document citation in RIE.

IDENTIFIERS:

Names of projects, geographic locations and the like used to index and retrieve documents (e.g., ESEA Title I, Project PLAN, IPI, cuisenaire rods).

AUTHORS:

Those authors known to be active in fields of educational interest (e.g., Popham -- educational objectives, Lessinger -- accountability, Holt -- classroom innovations).

INSTITUTIONS:

Recognized sources for documents related to a particular educational field (e.g., University of Wisconsin--center for cognitive learning, University of Chicago--evaluation, research.

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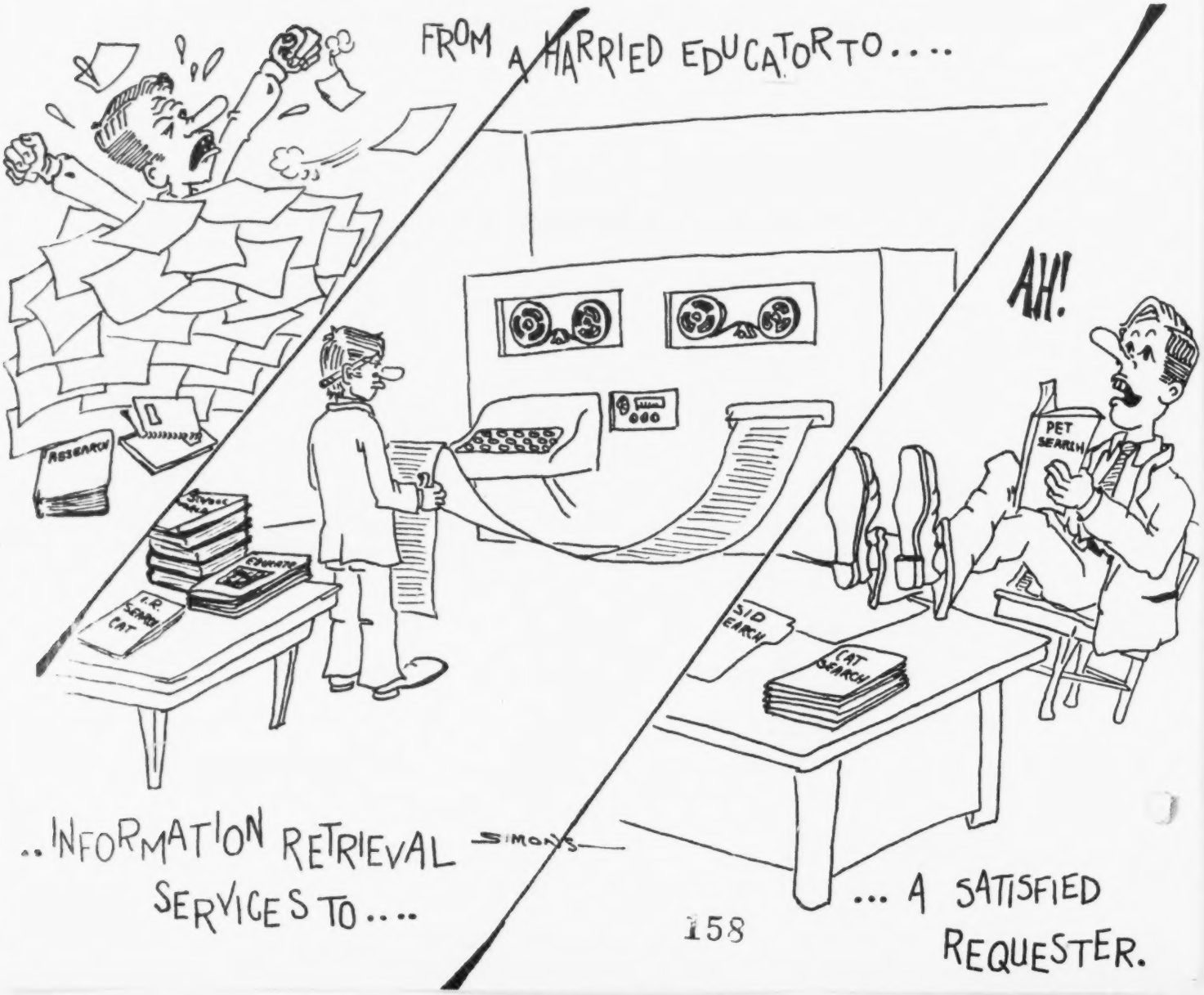

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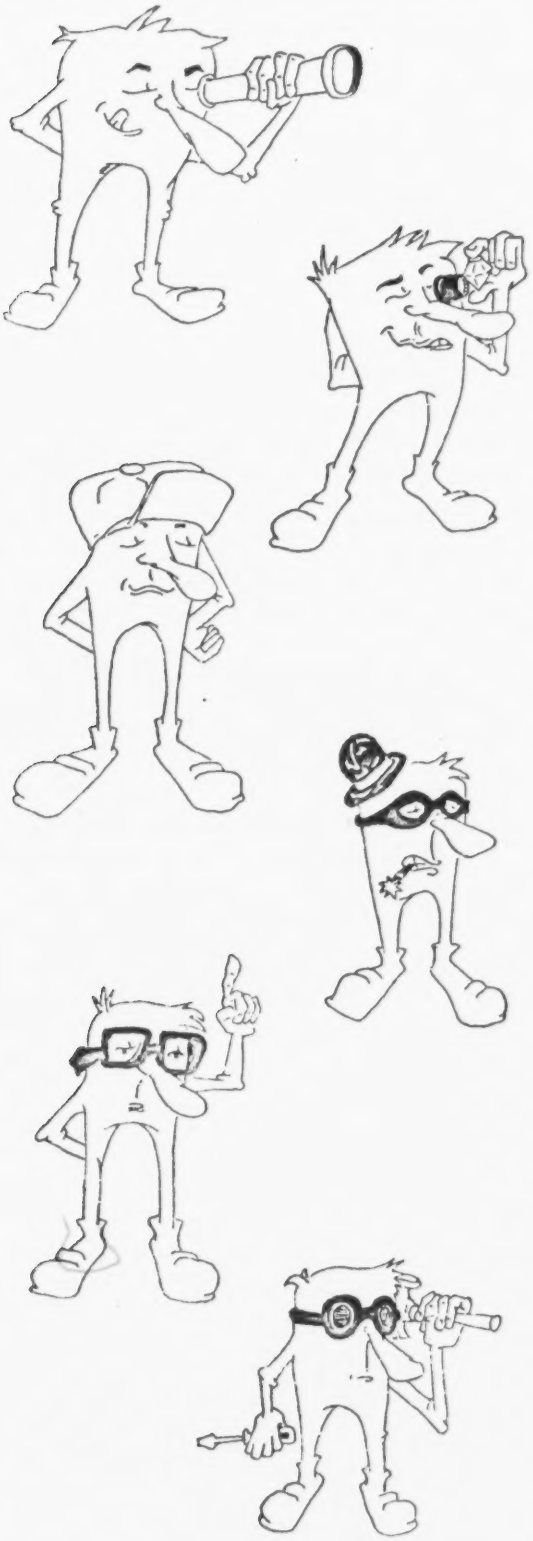

PET = PACKET OF EDUCATIONAL TOPICS

Packet titles represent a sampling of selected periodical articles providing general background information pertaining to broad topic areas.

CAT = CATALOG OF COMPUTERIZED SUBJECT SEARCHES

CAT profiles contain abstracts from Research In Education, an ERIC publication including "fugitive literature." CAT searches include materials relevant to a specific portion of a general subject.

CAP = CURRENT AWARENESS PROFILES

Current Awareness profiles are designed to give the information requestor a broad, but not necessarily comprehensive coverage of major educational areas of interest, to keep him up-to-date on happenings in a major field. CAP input comes from most recent RIE abstracts, and offers quarterly updates.

SID/RIE = SEARCH IN-DEPTH ON RESEARCH IN EDUCATION

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SID/CIJE = CURRENT INDEX TO JOURNALS IN EDUCATION

Individualized CIJE searches are retrieved from a data base containing over 47,000 journal entries. These periodical materials appear as bibliographic citations, some including annotations. SID/CIJE profiles may support SID/RIE's or serve as independent seaches.

SID/AIM-ARM = ABSTRACTS OF INSTRUCTIONAL MATERIALS, ABSTRACTS OF RESEARCH AND RELATED MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION

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Bethesda, Maryland 20014

AC ADULT EDUCATION
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Syracuse, New York 13210

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University of Michigan
Ann Arbor, Michigan 48104

EA EDUCATIONAL MANAGEMENT
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Eugene, Oregon 97403

EC EXCEPTIONAL CHILDREN
The Council for Exceptional Children
Washington, D.C. 20036

EM EDUCATIONAL MEDIA AND TECHNOLOGY
Stanford University
Stanford, California 94305

FL LANGUAGES AND LINGUISTICS
Modern Language Assn. of America
New York, New York 10011

HE HIGHER EDUCATION
Geo. Washington University
Washington, D.C. 20006

JC JUNIOR COLLEGES
University of Cal. at L.A.
Los Angeles, Calif. 90024

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PS EARLY CHILDHOOD EDUCATION
University of Illinois
Urbana, Illinois 61801

RE READING
Indiana University
Bloomington, Indiana 47401

RC RURAL EDUCATION AND SMALL SCHOOLS
New Mexico State University
Las Cruces, New Mexico 88001

SE SCIENCE MATHEMATICS & ENVIRONMENTAL EDUCATION
Ohio State University
Columbus, Ohio 43221

SO SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION
855 Broadway
Boulder, Colorado 80302

SP TEACHER EDUCATION
American Association of Colleges for Teacher Ed.
Washington, D.C. 20005

TE TEACHING OF ENGLISH
Nat'l. Council of Teachers of English
Champaign, Ill. 61820

TM TESTS, MEASUREMENT & EVALUATION
Educational Testing Svc.
Princeton, New Jersey 08540

UD DISADVANTAGED
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